# **Cultural Resources Inventory**

# High Desert Solar Project, Victorville

San Bernardino County, California

## **Prepared For:**

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#### MANAGEMENT SUMMARY

A cultural resources investigation was conducted for an approximately 699-acre Project Area of Potential Effects (APE) in the City of Victorville, San Bernardino County, California. The study was conducted at the request of HDSI, LLC for the proposed construction of a 108-megawatt solar photovoltaic energy facility as part of the High Desert Solar Project. The study was completed by ECORP Consulting, Inc. in compliance with Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA).

In March 2018, a cultural resources records search was conducted at the South Central Coastal Information Center at California State University, Fullerton; and in April 2018 a search of the Sacred Lands File was requested from the Native American Heritage Commission (NAHC). The records search results indicated that two prehistoric (pre-contact) resources, 21 historic-period resources, and one multi-component resource were previously recorded within the Project APE. An additional 65 resources have been documented within a one-mile radius of the Project APE. Fifty-three cultural resources investigations were conducted within the one-mile records search radius between 1967 and 2014. The results of the search of the Sacred Lands File by the NAHC did not indicate the presence of any Native American Sacred Lands within one mile of the Project APE.

As a result of the field survey, a total of 45 resources were identified within the Project APE. These include the 24 previously recorded resources noted above, 13 newly recorded sites, and eight newly recorded isolated finds within the Project APE. The 13 newly recorded sites consist of 12 historic-period (i.e. 50 years old or older) home sites and one historic-period refuse. Of the eight newly recorded isolated finds, seven consist of historic-period refuse, and one consists of a pre-contact lithic flake.

Following the field survey, the two previously recorded pre-contact sites (P36-003618 and P36-010952) were tested to determine the presence or absence of subsurface cultural material. Testing consisted of the excavation of 23 shovel test pits. As a result of testing, both sites were found to be negative for subsurface pre-contact cultural material. P36-003618 had a few surface artifacts, but had no subsurface cultural components. P36-010952 had no surface artifacts or subsurface components within the previously recorded site boundaries.

Of the 24 previously recorded resources within the Project APE, 20 were previously evaluated in 2006 using California Register of Historic Resources (CRHR) eligibility criteria, and were evaluated as not eligible for listing in the CRHR under any criteria. As part of the current study, ECORP has reviewed and concurs with the results of the previous evaluations. As part of the current study, 13 newly recorded sites, two previously recorded pre-contact sites, eight newly recorded isolated finds and one previously recorded isolated find were evaluated using CRHR eligibility criteria and are evaluated as not eligible for listing in the CRHR under any criteria. In addition to the CRHR evaluations, all 24 previously recorded resources and all 21 newly recorded resources were evaluated using National Register of Historic Places (NRHP) eligibility criteria and are evaluated as not eligible for the NRHP under any criteria.

All cultural resources in the Project APE were evaluated using NRHP and CRHR eligibility criteria and are evaluated as not eligible for listing in the NRHP or CRHR under any criteria. Because no Historic Properties

as defined by regulations implementing Section 106 of the National Historic Preservation Act (NHPA) and no Historical Resources as defined by CEQA were identified in the Project APE, the proposed Project would not result in adverse effects to Historic Properties or significant impacts to Historical Resources.

Although no Historical Resources as defined by CEQA or Historic Properties as Defined by Section 106 of the NHPA were identified within the Project APE, the area is located near the Mojave River in an area known to have been used by both pre-contact and historic occupants. The potential for the APE to contain subsurface cultural resources is considered high. ECORP recommends full-time monitoring of all ground-disturbing activity within APE. Recommendations for the management of unanticipated discoveries are also provided.

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Attachment A - Sacred Lands File Coordination

Attachment B - Project Area Photographs

Attachment C - **Confidential** Cultural Resource DPR 523 Site Records (Redacted)

Attachment D - **Confidential** Site Locations (Redacted)

#### **LIST OF ACRONYMS AND ABBREVIATIONS**

AB Assembly Bill

AMSL above mean sea level

AT&SF Atchison, Topeka, & Santa Fe
BESS battery energy storage system
BLM Bureau of Land Management

BP before present

CCR California Code of Regulations
CEQA California Environmental Quality Act
cmbs centimeters below the ground surface

CFR Code of Federal Regulations

CRHR California Register of Historical Resources
DPR Department of Parks and Recreation

FAR fire-affected rock

Gen-Tie generation interconnection

GLO General Land Office
MLD most likely descendants

MSF matchstick-filler

NAHC Native American Heritage Commission
NETROnline Nationwide Environmental Title Research

NHPA National Historic Preservation Act
NRHP National Register of Historic Places
OHP Office of Historic Preservation's

PRC Public Resources Code

PV photovoltaic

RPA Registered Professional Archaeologist

SB Senate Bill

SCCIC South Central Coastal Information Center

SCE Southern California Edison

STP Shovel test pit USC U.S. Code 5

USGS U.S. Geological Survey

VMUS Victorville Municipal Utility Services

WSA William Self Associates, Inc.

#### 1.0 INTRODUCTION

In March 2018, ECORP Consulting, Inc. conducted a cultural resources investigation of the High Desert Solar Project (Project) Area of Potential Effects (APE) in the City of Victorville, San Bernardino County, California (Figure 1). The study was conducted at the request of HDSI, LLC for the proposed construction of a 108-megawatt photovoltaic (PV) solar energy facility. The Project consists of four components: a 579-acre Solar Field Area, a 2.3-mile preferred generation interconnection (Gen-Tie) transmission line, a 2.5-mile alternative Gen-Tie transmission line, and a 1.7-mile Service Line (Figure 2). The Project APE includes these components in addition to a 30-meter buffer area around the two Gen-Tie alternatives and Service Line. A buffer was not surveyed around the Solar Field Area due to access restrictions for surrounding properties. The purpose of this study was to identify cultural resources that could be affected by the proposed Project. The study included a cultural resources records search, a Native American Heritage Commission (NAHC) Sacred Lands File search, a field survey, subsurface testing for two sites, and resource evaluations for the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP). This Project was completed in compliance with Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA).

## 1.1 Project Location

The Project APE is located north and east of the Southern California Logistics Airport in the City of Victorville (Figure 1). As shown on the U.S. Geological Survey (USGS) 7.5-minute Victorville Northwest (1956, Victorville (1956), and Helendale (1956) topographic quadrangle maps, the Project APE is located in Sections 1, 2, 3, 10, 11, 13, and 24 of Township 6 north, Range 5 West; and Sections 35, 35, and 36 of Township 7 North, Range 5 West, of the San Bernardino Base and Meridian (see Figure 2). The project site is located within the Southern California Logistics Airport (SCLA) Specific Plan (SP1-92). "Power or Power Generating Plant" is a permitted use allowed through a Conditional Use Permit (CUP) process in areas designated as Industrial in the SCLA Specific Plan. The 230kV Gen-Tie will also traverse areas zoned as "Exclusive Agricultural". Power lines of 100kV or more are a permitted use with a CUP in the Exclusive Agricultural zone per Table 7-1 of the City's Development Code (City of Victorville 2008; 2004).

Currently the project site contains several previously disturbed areas consisting of old, abandoned structures and concrete foundations, illegal dumping sites, and large areas of undeveloped land. There are currently identified underground utilities that cross and/or run adjacent the Solar Field Area or the Interconnection Facilities, including: a natural gas pipeline, a petroleum products pipeline, reclaimed water pipeline(s), and telecom communications cables.

The elevation of the Project APE ranges from 2,654 feet above mean sea level (AMSL) to 2,854 feet AMSL. It is located approximately 0.5-mile (805 meters) west of the Mojave River, which emanates from the San Bernardino Mountains 18.95 miles (30.5 km) to the south. Surface sediments in the Project APE are Pleistocene and Holocene quaternary alluvium, made up mostly of sand, silt, and gravel (Dibblee 1960). The Pleistocene alluvial deposits underlie the eastern two-thirds of the Solar Farm area and majority of the Gen-Tie. Holocene alluvial deposits underlie the western third of the Solar Farm Area and the Gen Tie Staging Area. Vegetation within the Project APE consists primarily of creosote, bursage, Russian thistle,

and Joshua tree. At the time of the cultural resources field survey, ground visibility was very good (approximately 95 percent visibility).

## 1.2 Project Description

The High Desert Solar Project (HDSP) will be a nominal 108 megawatt (MWac) solar photovoltaic (PV) power facility and related substation with the potential of an integrated battery energy storage system (BESS), located in the City of Victorville, San Bernardino County, California. The HDSP will provide renewable energy and critically needed flexibility attributes needed to advance California's Renewable Portfolio Standard (RPS) goals, climate policies, and to enhance electrical grid reliability.

The HDSP will be developed on a total of approximately 625 acres (Project site) consisting of an approximately 579 acre solar PV field, BESS, substation, and balance of system, collectively referred to as the Solar Field Area, and an approximately 35 acre corridor consisting of a 2.3 mile 230kV generation tie line (Gen-Tie) that will run east and then south in a defined and studied corridor to connect to the existing Victor-Caldwell 230kV line, upstream of the first pole on the Southern California Edison system.

Additionally, a 1.7 mile 12.47kV Service Line (Service Line) will connect to the Victorville Municipal Utility Services (VMUS) system. This line will run as underbuilt with the 230kV line for the first mile and then diverge to the west and run on standard distribution utility poles to connect to VMUS at the Victorville Industrial Wastewater Treatment Facility south of the Solar Field Area. The Gen-Tie and Service Line will be located within linear corridors (120 feet and 40 feet wide, respectively), covering a total area of approximately 35 acres of which only a small portion will actually be disturbed. The Gen-Tie and Service Line are collectively referred to herein as the Interconnection Facilities. A 11-acre laydown area will be used for staging during construction of the Interconnection Facilities.

The Project will be comprised of the following Project components located within the Project site:

- Approximately 320,000 370,000 PV modules
- A single axis tracker system
- Electrical inverters and transformers
- Battery energy storage system (BESS)
- An onsite electrical substation
- Meteorological stations
- Remote monitoring system (SCADA)
- Site access roads and maintenance access roads
- Security fencing and desert tortoise exclusion fencing
- Gen-Tie structures to interconnect with SCE 230kV transmission line south of the site and a
   12.47kV Service Line to interconnect to the VMUS electrical system east of the site

This Project also included survey of an approximately 2.5-mile alternative Gen-Tie corridor and a 11-acre Gen-Tie laydown area. The first 0.87-mile of the alternative Gen-Tie corridor overlaps with the preferred Gen-Tie corridor. At this point the corridors diverge and the alternative Gen-Tie extends to the west, and then turns south, skirting the western edge of the wastewater treatment facility. The alternative Gen-Tie then turns to the southwest and converges with the preferred Gen-Tie corridor for the remaining 0.51-mile segment to the SCE pole interconnection point near the Caldwell Substation.

#### 1.3 Area of Potential Effects

The Area of Potential Effects (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if present. The APE for the Project includes all of the Project components described in the Project description as well as additional temporary impact areas and a 30-meter buffer around the Gen Tie alternatives and Service Line. Components of the APE include the Solar Field Area, the preferred Gen-Tie, the alternative Gen-Tie, the Gen-Tie laydown area, temporary Gen-Tie impact areas, and the Service Line. The APE has a total area of approximately 699 acres (Figure 3). The northern extent of the APE and survey coverage area lies approximately 0.5-mile south of Purple Sage Street, the western extent lies 0.26-mile east of Topaz Road, the eastern extent lies 0.41-mile east of the Mojave River, and the southern extent lies 0.31-mile north of Phantom East, along the east side of Perimeter Road. The maximum length of the APE, including all Project components, is approximately 3.5 miles, the maximum width is 1.04 mile.

## 1.4 Definition of Important Terms

The prehistoric (pre-contact) period is defined as any resource originating prior to contact between the local Native American population and European setters. The historic period is defined as any resource ranging in age from the time of first contact between the local Native American population and European settlers to 50 years before present. For the Victor Valley area, the historic period begins when the Spanish expeditions led by Fages and Garces pass through the area in the 1770s. A multi-component site is a site containing both pre-contact and historic period site constituents. As it is difficult to determine if certain Native American artifacts (i.e., lithic artifacts) were produced during the historic or pre-contact periods, it is standard archaeological practice to record such artifacts as pre-contact in origin.

Isolated finds consist of one or two artifacts which are not associated with other artifacts or features and are not connected with the human activity that produced them. A site is the location of a pre-contact or historic occupation or activity, or the location of a significant event (OHP 1995)

## 1.5 Regulatory Context

To meet the regulatory requirements of this Project, this cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained within Section 106 of the NHPA and in CEQA (Public Resources Code [PRC] § 21000 et seq.) The goal of NHPA and CEQA is to develop and maintain a high-quality environment that serves to identify the potential significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed projects that require state or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional

use permits, and the approval of development project maps. The NHPA pertains to projects that have federal funding or require a federal permit.

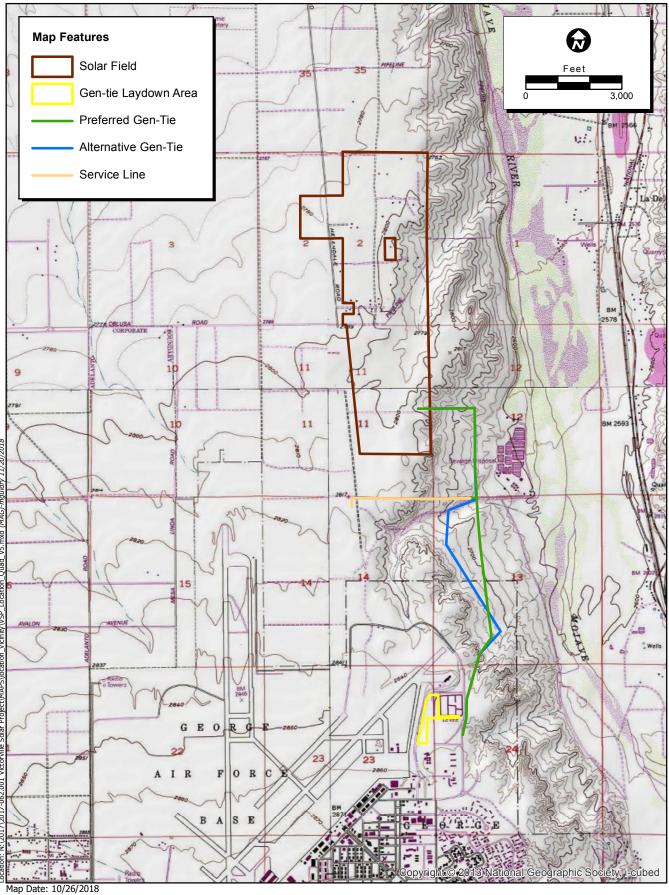
The NHPA and CEQA (Title 14, California Code of Regulations [CCR], Article 5, § 15064.5) apply to cultural resources of the historical and pre-contact periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources.

Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the CRHR (PRC § 5024.1, Title 14 CCR, § 4852) or the NRHP (36 Code of Federal Regulations [CFR] 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under regulations implementing Section 106 of the NHPA (36 CFR 800). and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources as defined by CEQA.



Service Layer Credits: Sources: USGS, ESRI, TANA, AND

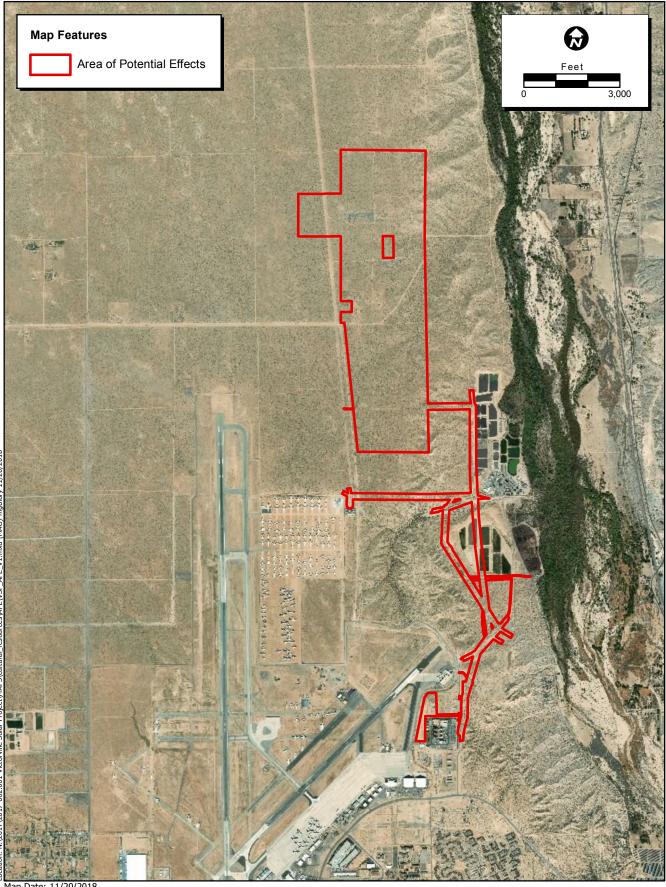




Map Date: 10/26/2018 Source: USGS Topographic Quadrangle



Figure 2. Project Location 2017-062 Victorville Solar Project



Map Date: 11/20/2018 Photo Source: Esri World Imagery



## 1.6 Report Organization

The following report documents the study and its findings and was prepared in conformance with the California Office of Historic Preservation's (OHP) *Archaeological Resource Management Reports:*Recommended Contents and Format. Attachment A contains documentation of a search of the Sacred Lands File. Attachment B presents photos of the Project APE, Attachments C and D contain confidential site location information and have been redacted from this report.

Sections 6253, 6254, and 6254.10 of the California Code authorize state agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code § 6250 et seq.) and California's open meeting laws (The Brown Act, Government Code § 54950 et seq.) protect the confidentiality of Native American cultural place information. Under Exemption 3 of the federal Freedom of Information Act (5 U.S. Code 5 [USC]), because the disclosure of cultural resources location information is prohibited by the Archaeological Resources Protection Act of 1979 (16 USC 470hh) and Section 304 of the NHPA, it is also exempted from disclosure under the Freedom of Information Act. Likewise, the Information Centers of the California Historical Resources Information System maintained by the OHP prohibit public dissemination of records search information. In compliance with these requirements, the results of this cultural resource investigation were prepared as a confidential document, which is not intended for public distribution in either paper or electronic format.

#### 2.0 CULTURAL CONTEXT

## 2.1 Regional Prehistory

Two significant volumes on the prehistory of California, *The Archaeology of California* by Joseph and Kerry Chartkoff, and *California Archaeology* by Michael Moratto, were published in 1984. At that time, Warren (1984, in Moratto 1984) provided a modified version of his earlier (1980) Mojave Desert chronology. The 1984 version included six cultural periods marked primarily by projectile point types (Table 1).

Table 1. Cultural Sequences for the Mojave Desert Region, California					
Cultural Complex	Approximate Time Period in Years Before Present (BP) and Calendar Years AD	Characteristic Artifacts			
Fluted Point, or Pleistocene Period	12,000 – 10,000 BP	Fluted points (Clovis)			
Lake Mojave Period	10,000 – 7,000 BP	Stemmed points (Lake Mojave, Silver Lake)			
Pinto Period	7,000 – 4,000 BP	Pinto and leaf-shaped points			
Gypsum Period	4,000 BP – AD 500	Gypsum and Elko series points			
Saratoga Spring Period	AD 500 – 1200	Rose Spring, Eastgate, Saratoga Spring points			
Late Prehistoric, or Shoshonean Period	AD 1200 – Contact with European explorers ca. 1770	Desert Series points, ceramics			

Adapted from Warren 1980, 1984

New research has led to refinements of the pre-contact chronology of the Mojave Desert region since the early 1980s, including new applications of radiocarbon dating on marine shell and organic materials in sediments, improved understanding of obsidian hydration rates, and more detailed flaked-stone technology profiles. This ongoing research has contributed new information that has enhanced understanding of the pre-contact chronology of the Mojave Desert region, a chronology that will most likely continue to be refined in the future. Sutton et al. (2007) discuss these refinements in depth, and present a slightly modified chronological sequence, which is, nonetheless, very similar to that of Warren (1984). Sutton et al. (2007) place their chronology in the context of climatic periods (Pleistocene, early Holocene, middle Holocene, and late Holocene) separated further by cultural complexes based upon technological advances. In addition to the cultural complexes, Sutton et al. (2007) include a hypothetical Pre-Clovis complex, pre-dating 12,000 years before present (BP), for which there is little or no solid archaeological evidence in the Mojave Desert. They also propose a Deadman Lake complex roughly contemporaneous with the Pinto Period, based on artifact assemblages they contend are unique to the Twentynine Palms area. A brief discussion of the different cultural complexes is presented below in Table 2.

Table 2. Temporal Periods and Cultural Sequences for the Mojave Desert Region, California					
Temporal Period	Cultural Complex	Approximate Dating	Characteristic Artifacts		
	Pre-Clovis (hypothetical)	Pre-12,000 BP	Unclear		
Pleistocene	Fluted Point, or Pleistocene Period	12,000 – 10,000 BP	Fluted points (Clovis)		
Fash Halanana	Lake Mojave Period	10,000 – 8,000 BP	Stemmed points (Lake Mojave, Silver Lake)		
Early Holocene	Pinto Period	9,000 – 5,000 BP	Pinto and leaf-shaped points		
Middle Holocene	Deadman Lake (Provisional)	3,000 0,000 -	Contracting-stem and leaf-shaped points		
	Possible population hiatus	5,000 – 4,000 BP	Few sites or artifacts		
	Gypsum Period	4,000 BP – AD 200	Gypsum and Elko series points		
Late Holocene	Saratoga Spring, or Rose Spring Period	AD 200 – 1100	Rose Spring, Eastgate, Saratoga Spring points		
	Late Prehistoric, or Shoshonean Period	AD 1100 – Contact	Desert Series points, ceramics		

Adapted from Sutton et al. 2007

#### 2.1.1 Fluted Point or Late Pleistocene Period – 12,000 to 10,000 BP

In the face of growing evidence of earlier occupation of other regions of North America, the presence of humans in the Mojave Desert prior to 12,000 BP cannot be discounted. The oldest well-identified cultural complex in the Mojave Desert is Clovis (ca. 12,000-10,000 BP), characterized by the long, fluted Clovis projectile point and Clovis-like points known as Great Basin Concave Base points (Basgall and Overly

2004). Reliable radiocarbon dates for organic material associated with fluted points in the Mojave Desert are lacking, but obsidian hydration has established that they have older relative ages than stemmed points from the same region. Only one possible Clovis occupation site has been found, at China Lake, while other fluted points have been recorded as isolated finds. Very little can be inferred about the people who created these fluted points, except that they most likely lived in highly mobile small groups and camped near reliable sources of water. Fluted point finds are concentrated in the China Lake and Lake Thompson (predecessor of Rosamond, Rogers, and Buckhorn lakes) areas, which are known to have had significant stream runoff and to have been good water sources during the Pleistocene/Holocene Transition, continuing during the early Holocene (Sutton et al. 2007).

### 2.1.2 Lake Mojave Period (Early Holocene) – 10,000 to 8,000 BP

The best-documented cultural complex in the region during the early Holocene is the Lake Mojave period, characterized by Great Basin Stemmed (Lake Mojave and Silver Lake) points, numerous bifaces including crescents, unifaces, and sometimes ground stone artifacts. Non-local lithic materials and shell beads in Lake Mojave assemblages indicate long foraging trips and/or trade with other regions. The small number of ground stone implements, and the lack of extensive wear on them, suggests that vegetal resources were not used heavily. As with the Fluted Point Period, social groups of the Lake Mojave Period appear to have been small, highly mobile, and attracted to a variety of environments where water was available. Interestingly, archaeofaunal data indicate a reliance on small game like rabbits, hares, rodents, and reptiles, rather than bigger game implied by the large projectile points. Lake Mojave Period artifacts have been mostly surface finds, making absolute dating by radiocarbon methods difficult (Sutton et al. 2007). Numerous Lake Mojave Period artifacts have been documented at Rosamond Lake (Edwards Air Force Base), ancient Lake Mojave (Silver and Soda dry lakes), and on neighboring military installations such as Fort Irwin, China Lake Naval Air Weapons Station, and the marine Corps Air Ground Combat Center at Twentynine Palms.

#### 2.1.3 Pinto Period (Early to Middle Holocene) - 9,000 to 5,000 BP

Previous investigators (e.g., Moratto 1984) defined the Pinto Period as a response to Mid-Holocene climatic warming and desiccation in the Great Basin, including the Mojave Desert. In this scenario, the Pinto Period began after the Lake Mojave Period at about 7,000 BP, corresponding roughly with the Holocene Maximum warming trend. At first, groups of hunter-gatherers adapted to the drying, warming conditions, possibly by abandoning the desert floor and occupying the higher, wetter margins for a thousand years or more. As the climate cooled again, the desert was repopulated as springs, streams, and shallow lakes reappeared (Moratto 1984). Information gathered during the past two decades suggests that the Pinto Period began during the early Holocene and overlapped the Lake Mojave Period. Recently obtained radiocarbon dates from Pinto Basin, Little Lake, Fort Irwin, and Twentynine Palms indicate ages of at least 9,000 years for some Pinto sites (Sutton et al. 2007). Although there is still some debate about the inception of the Pinto complex, it is clear that it is probably older than had been previously thought.

Pinto artifact assemblages have less diversity of lithic materials than their Lake Mojave predecessors, suggesting a reduced range. At the same time, the presence of *Olivella* shell beads suggests that there was trade with coastal groups. Ground stone milling tools are much more prevalent than in Lake Mojave

assemblages, indicating that extensive plant food processing began at the end of the early Holocene, before the beginning of the dry, warm conditions that affected the desert floor during the middle Holocene (Sutton et al. 2007).

### 2.1.4 Gypsum Period (Late Holocene) – 4,000 BP to AD 200

Near the end of the middle Holocene, harsh climatic conditions associated with the Holocene Maximum warming trend (also known as the Altithermal) may have resulted in very low population densities, and even temporary abandonment, of large expanses of the Mojave Desert. Very few sites have been dated to a timespan between about 5,000 and 4,000 BP that separates the Pinto and Gypsum complexes. The appearance of corner-notched (Elko), concave-base (Humboldt), and contracting-stemmed (Gypsum) projectile points in late Holocene sites of the western and northern Mojave signals the beginning of the Gypsum Period, as temperatures began to ameliorate during the First Neoglacial episode at the beginning of the late Holocene (Moratto 1984; Sutton et al. 2007).

In addition to the characteristic projectile point types, Gypsum assemblages include leaf-shaped points, stone knives, flake scrapers, t-shaped drills, choppers, hammer stones, shaft smoothers, ornamental items, split-twig animal figures, and paint. Some of these items, along with the presence of rock art, suggest ritual activities. Manos, metates, mortars, and pestles are also found (Moratto 1984; Sutton et al. 2007). Gypsum sites are generally smaller and more numerous than earlier components, and are spread over a wider variety of environments. Socio-economic contact with the California coast is indicated by the presence of shell beads. Gypsum Period sites show evidence of exploitation of split-hoofed animals, rabbits, hares, and rodents, as well as hard seeds and mesquite. Better technology and somewhat more complex social organization (compared to the previous Pinto population) probably helped peoples of the Gypsum complex adapt to the warming and drying conditions that began again after about 2,000 years ago. A more successful adaptation to the warm dry conditions is indicated because another population hiatus did not occur in the Mojave Desert during this period (Moratto 1984; Sutton et al. 2007). By around 3,000 BP, the Northern Uto-Aztecan peoples who had probably come from northern Mexico around the end of the Pinto Period had separated into Tubatulabalic, Hopic, Numic, and Takic language groups (Sutton et al. 2007).

#### 2.1.5 Saratoga Spring or Rose Spring Period (Late Holocene) – AD 200 to 1100

Although the climate was warmer at the beginning of the Saratoga Spring Period than it had been during the First Neoglacial episode, conditions were sufficiently mesic to support springs and streams in the Mojave Desert, and possibly even shallow perennial lake stands at some of the desert playas (Sutton et al. 2007). Archaeological data suggest a significant increase in population, especially in the western Mojave. Projectile points indicate that the bow and arrow were introduced to the Mojave Desert during the Saratoga Spring Period. While they probably do not indicate a major cultural change in the region (Moratto 1984), they were a technological advance that may have improved hunting efficiency and increased the carrying capacity of the land, resulting in a rise in population (Sutton et al. 2007).

Saratoga Spring sites in the southern Mojave Desert reflect the influence of Hakataya culture from the lower Colorado River by the inclusion of buffware and brown ware pottery sherds and Desert Side-Notched and Cottonwood points. Hakataya intrusion or influence probably extended as far north and

west as the east side of Antelope Valley (Moratto 1984). Anasazi pottery and turquoise mining sites indicate the presence and influence of Pueblo peoples in the eastern Mojave during the Saratoga Spring Period (Moratto 1984). In the western Mojave, particularly Antelope Valley, the effects of Hakataya and Anasazi contact or intrusion appear to have been minimal. Large village sites with cemeteries and well-developed middens, indicating long-term occupations, have been documented there. Among the artifacts found in Saratoga Spring sites of the Antelope Valley are steatite items and large numbers of shell beads, probably indicating trade with coastal groups (Moratto 1984; Sutton et al. 2007).

The rise in temperature and return to xeric conditions and occasional severe droughts associated with the Medieval Climatic Anomaly affected roughly the second half of the Saratoga Spring Period, beginning around AD 700. Deteriorating climatic conditions in the Mojave Desert led to a population decline, and may have been partially responsible for bringing the Saratoga Spring complex to an end around AD 1100 (Sutton et al. 2007).

#### 2.1.6 Late Prehistoric Period (Late Holocene) – AD 1100 to Contact (ca. 1770)

The several tribes occupying the Mojave Desert at the time of contact with Europeans are believed to have had their genesis in the separate cultural complexes that developed during the Late Prehistoric Period (Moratto 1984; Sutton et al. 2007). Toward the end of the Medieval Climatic Anomaly, the population of the Mojave continued a decline that had begun during the Saratoga Spring Period. Hakataya and Anasazi cultural influences remained in the southern and eastern parts of the region, respectively. By around AD 1000, the Numic speakers of the western Mojave Desert had differentiated into distinct language groups, one of which was the Southern Paiute, which spread eastward and occupied an area north of the Mojave River. The Chemehuevi branch of the Southern Paiute later moved south along the west side of the Colorado River as far as the Chuckwalla Valley. The Shoshone moved into territory even farther north. South of the Mojave River, and in much of southern California, Takic-speaking groups were predominant (Sutton et al. 2007).

Late Prehistoric sites are abundant in the Mojave Desert, and include lithic scatters, temporary campsites, and large villages with middens and cemeteries. Artifacts include Desert series projectile points, ground stone milling tools, shell beads, incised stones and pendants, and brown ware and buffware ceramics. Obsidian was not used as frequently as during earlier periods. Faunal remains at archaeological sites indicate that deer, rabbits, hares, rodents, and reptiles were eaten, along with a wide variety of vegetal foods, indicated by ground stone grinding implements (Sutton et al. 2007). Trade, especially along the Mojave River and in the Antelope Valley, appears to have enabled the transport of resources over long distances, possibly mitigating against shortages and making a more sedentary, village-oriented existence possible during the Late Prehistoric Period (Moratto 1984).

## 2.2 Ethnohistory

The Project APE is located within the territory known to have been occupied by the Serrano Native American group prior to contact with Europeans, as well as the Vanyume group of Native Americans. The Chemehuevi, whose main territory was in the eastern Mojave Desert and around the Colorado River, were occasional enemies or allies of the Serrano, and were sometimes found in Lucerne Valley and northern

reaches of the San Bernardino Mountains in the early historic period. All three groups are discussed below.

The Serrano were mainly hunters and gatherers who occasionally fished. Game that was hunted included mountain sheep, deer, antelope, rabbits, small rodents, and various birds, particularly quail. Vegetable staples consisted of acorns, pinyon nuts, bulbs and tubers, shoots and roots, juniper berries, mesquite, barrel cacti, and Joshua tree (Bean and Smith 1978).

A variety of materials were used for hunting, gathering, and processing food, as well as for shelter, clothing, and luxury items. Shells, wood, bone, stone, plant materials, and animal skins and feathers were used for making baskets, pottery, blankets, mats, nets, bags and pouches, cordage, awls, bows, arrows, drills, stone pipes, musical instruments, and clothing (Bean and Smith 1978).

Settlement locations were determined by water availability, and most Serranos lived in villages near water sources. Houses and ramadas were round and constructed of poles covered with bark and tule mats (Kroeber 1925). Most Serrano villages also had a ceremonial house used as a religious center. Other structures within the village might include granaries and sweathouses (Bean and Smith 1978).

Serrano social and political units were clans, patrilineal exogamous territorial groups. Each clan was led by a chief who had both political and ceremonial roles. The chief lived in a principal village within the clan's territory. The clans were part of a moiety system such that each clan was either a wildcat or coyote clan and marriages could only occur between members of opposite moieties (Earle 2004). On the north side of the San Bernardino Mountains, clan villages were located along the desert-mountain interface on Deep Creek, on the upper Mojave River, in Summit Valley, and in Cajon Pass. The principal plant food available near these villages was juniper berries. These villages also had access to mountain resources, such as acorns and pinyon nuts.

Vanyume villages were located along the Mojave River from south of Victorville to Soda Lake. These river villages had populations of 40-80 people. Marriage ties between the Serrano foothill villages and Vanyume desert villages facilitated access to mountain resources, such as acorns and pinyon nuts, by the desert villages. The principal desert resources were mesquite beans, screw beans, tule reed roots, and carrizo grass sugar (produced by aphids that lived on the Carrizo grass). Animal resources were rabbits, jackrabbits, desert bighorn sheep, pronghorn, and desert tortoise (Earle 2004:10). The Vanyume also collected salt from Soda Lake and from the Barstow-Daggett area to exchange for acorns and other resources from the mountains (Earle 2004:11).

Partly due to their mountainous and desert inland territory, contact between Serrano and European-Americans was minimal prior to the early 1800s. In 1819, an *asistencia* (mission outpost) was established near present-day Redlands and was used to help relocate many Serrano to Mission San Gabriel. However, small groups of Serrano remained in the area northeast of the San Gorgonio Pass and were able to preserve some of their native culture. Today, most Serrano live either on the Morongo or San Manuel reservations (Bean and Smith 1978).

The Chemehuevi are one of 16 identified Southern Paiute groups that at one time occupied a wide strip of territory extending across southern Utah and southern Nevada and following the Colorado River into

California. The main territory occupied by the Chemehuevi group was west of the Colorado River, extending approximately from present-day Blythe to just north of Needles, and into California halfway to Twentynine Palms (Kelly and Fowler 1986; Earle 1997).

The Chemehuevi hunted large game, but small animals were the chief source of protein and included rabbits, wood rats, mice, gophers, squirrels, chipmunks, and birds. Plant foods included piñon nuts, roots agave, seed, and berries. Some horticulture was being practiced at the time of Spanish contact in the 1770s (Earle 1997). Settlement was mobile and scattered, with recurrent residence in specific locations. Individual households grouped together with others and traveled as units on hunting and gathering trips (Kelly and Fowler 1986). Structures varied according to the season. During the winter, the Chemehuevi lived in earth-covered dwellings or caves. In warmer months, many lived under trees, sometimes with extra brush added for denser shade (Kelly and Fowler 1986).

As early as the end of the eighteenth century, Southern Paiute-Chemehuevis were being enslaved or baptized in the Spanish settlements. In response, some Chemehuevi raided travelers along the Old Spanish Trail from the 1850s to the early 1870s. During that time, efforts were made to settle the Chemehuevi on the Colorado River Reservation, but many did not agree to move there until the twentieth century. The early 1900s saw the establishment of a number of small reservations in Utah for the Southern Paiute. In 1980, the Southern Paiute-Chemehuevi numbered approximately 124 (Kelly and Fowler 1986).

## 2.3 History

The first significant European settlement of California began during the Spanish Period (1769-1821) when 21 missions and four presidios were established between San Diego and Sonoma. Although located primarily along the coast, the missions dominated economic and political life over the majority of the California region. The purpose of the missions was primarily Indian control and forced assimilation into Spanish society and Catholicism, along with economic support to the presidios (Castillo 1978).

The Mexican Period (1821-1848) began with the success of the Mexican Revolution in 1821, but changes to the mission system were slow to follow. When secularization of the missions occurred in the 1830s, the vast land holdings of the missions in California were divided into large land grants called ranchos. The Mexican government granted ranchos throughout California to Spanish and Hispanic soldiers and settlers (Castillo 1978; Cleland 1941).

In 1848, the Treaty of Guadalupe Hidalgo ended the Mexican-American War and marked the beginning of the American Period (1848 to present). The discovery of gold that same year sparked the 1849 California Gold Rush, bringing thousands of miners and settlers to California from various parts of the United States, most of whom settled in the north. For those settlers who chose to come to southern California, much of their economic prosperity was fueled by cattle ranching rather than by gold. This prosperity, however, came to a halt in the 1860s as a result of severe floods and droughts, which put many ranchos into bankruptcy (Castillo 1978; Cleland 1941).

The first known European visitors to the Mojave Desert via the Cajon Pass were Lieutenant Pedro Fages and a small party of soldiers, who traversed the pass and skirted along the north side of the San Gabriel Mountains toward the west in 1769. In 1776, while exploring a route across the Mojave Desert from the

Colorado River to Mission San Gabriel, Father Francisco Garces, accompanying the expedition of Juan Bautista de Anza, passed through the Victor Valley area, establishing a section of what would become the "Old Spanish Trail". The expedition party is believed to have camped approximately 1.5 miles southeast of present-day Hesperia. In 1826, Jedediah Smith and a group of trappers followed this route from present-day Needles to Mission San Gabriel, becoming the first White man to cross through the Victor Valley area. General John Fremont and Kit Carson also followed this route during an 1842 U.S. Army expedition to explore the Mojave Desert and to determine the Mexican military presence in the area. In the following years, hundreds of settlers used the trail to come to Spanish California. After the Mexican-American War officially ended in 1848, a group of Mormon war veterans who had been guarding the Cajon Pass against horse thieves were allowed to return home and are credited with being the first to take a wagon up the pass and through Victor Valley on their way home to Utah (California Historic Route 66 Association 1996; City of Hesperia 2002).

During the Spanish and Mexican periods, there was little activity in the area that would later come to be known as Victor Valley, because of its distance from the coast and the mission system. The Mojave River Narrows area was a favorite summer location for the large mission herds and subsequently the equally large herds of Rancho San Bernardino under Antonio Maria Lugo. In 1819, seven neophytes, sent by the padres of Mission San Gabriel to establish an *asistencia* at the Mojave River Narrows, were killed by hostile Indians. The perpetrators were most likely Mojave Indians who were known to terrorize not only Spanish supply lines, but also the local tribes of the desert. Evidence of Spanish mining activities has been found in the Lucerne Valley to the east, and similar small-scale operations may have taken place in the small hills and ranges surrounding Victor Valley. That the Spanish were limited to such minor operations may be attributable to the ferocity of the Mojaves and other Indians of the desert. Although the "Old Spanish Trail" traversed through the area, Victor Valley was never successfully settled by the Spanish or their Mexican descendants (California Historic Route 66 Association 1996).

With the conclusion of the Mexican–American War in 1848 making California part of the United States and the Gold Rush that followed less than a year later, White settlers began pouring into the new territory. Within 10 years there were a few White settlers on the Mojave River. A census shows there were 10 people living in two residences on the Mojave River by 1860. Listed in Dwelling No. 703 were Aaron Lane, William R. Levick, and the Nicholson family, consisting of George and Frances, and their three children aged nine to 13. Joseph and Mary Highmoor lived in Dwelling No. 704, with a seven-year-old female named Anna (Thompson et al. 1995).

Aaron Lane can be placed on the Mojave as early as 1858 and had probably taken advantage of an announcement from the Commissioner of the General Land Office (GLO) in the spring of 1858 that public land was for sale in the high desert. Mr. Lane laid claim to land near the Lower Narrows of the Mojave River approximately two miles north of present day Victorville. This location was not picked by accident, since this was the site where the "Old Spanish Trail" crossed the Mojave River and turned southwest to the Cajon Pass. This spot soon became known as Lane's Crossing, at first a humble station where the early desert travelers could obtain the bare necessities of life. Here Aaron Lane grew hay, barley, and other crops on a small scale to feed his own stock and those of the travelers who stopped at his station. By

1863, he owned a small quantity of stock for breeding or to provide milk and meat for his guests, as well as a small honeybee enterprise (Thompson 1995).

Several other way stations began to appear on the road along the Mojave River in the early 1860's, including Point of Rocks, Cottonwoods, Grapevine, and Fish Ponds. All of these stations were located downstream from Lane's Crossing, however, making Lane's either the last stop before heading over the Cajon Pass or the first stop through the desert. Because of its location, Lanes Crossing was the hub of activity for several years in the Mojave River area. That influence in the area soon ended, as a new road was established in 1867 by Lafayette Mecham, the owner of the way station at Fish Ponds. This new road bypassed the old river route, which traveled in a large arc to the north and then east. This new road would run directly southwest from Fish Ponds to Little Meadow. Little Meadow was upriver from Lane's Crossing near the Mojave River's Upper Narrows, and it was here that the new road crossed the river. When Sheldon Stoddard dug a well along the route, eliminating one of the road's major drawbacks, it became a very advantageous shortcut and was named Stoddard's Well Road. Another road was cut joining Lane's Crossing with Stoddard's Well Road, but because of the shorter distance and firmness of Stoddard's Well Road, the stage line began using the new route (California Historic Route 66 Association 1996; Thompson 1995).

The financial opportunity of this new and untapped route was not lost on other enterprising men of the time. Almost immediately, land around the new crossing was being claimed and filed on and in 1870, two settlers, A. F. McKenney and Jesse W. Taylor, combined their adjoining properties and established a new way station known as McKenney Station. Here McKenney provided fresh horses for the stagecoaches, blacksmithing services and meals to the stage line drivers. The station changed owners over the next few years, until it came into the hands of Heber Huntington in 1873, who added a trading post and supplied provisions to the stage line. The site was renamed Huntington Station and retained this name until 1885. Others looking to benefit from the new route included the Brown family, which consisted of four brothers. In 1869, they began filing on a few hundred acres of land upriver from the new crossing. The Brown family increased their holdings over the course of time to include property extending to the vicinity of the upper narrows on the north, and Bear Valley Road on the south. The spread was known as the Brown Ranch during the family's ownership, although it seems that none of the Brown brothers ever homesteaded on their property. The Brown Ranch was eventually sold in 1898 due to a severe recession that caused several bank failures in the 1890s. The Brown Ranch was auctioned off, and in 1901 several of the new mortgage holders incorporated their holdings into the Rancho Verde Company (Thompson 1995).

Although the new road and crossing spurred some interest in Victor Valley, the area was still considered remote and unsettled. In 1883, the construction of a railroad, the landmark event in the history of the Western Mojave, occurred. Built by the California Southern Railroad (later Atchison, Topeka, & Santa Fe [AT&SF] Railroad) under the supervision of L. N. Victor, the first tracks wound up the Cajon Pass from San Bernardino into the Victor Valley. The line reached the AT&SF Railroad transcontinental mainline to the east at Daggett (near present day Barstow) in 1885. Huntington Station became a railroad substation and changed its name to Victor, in honor of the construction superintendent. Within a single year, the Plan of the Town of Victor was prepared, which created the grid pattern of the original town. The name of the town was changed to Victorville in 1901 by the U.S. Post Office to avoid confusion with Victor, Colorado.

The abundance of good water and the availability of rich bottom lands led to agricultural development along the Mojave River shortly after the establishment of the railroad depot. When fruit trees were shown to thrive in the rich soil, many of the ranches planted apple and pear orchards in addition to their normal activities (California Historic Route 66 Association 1996; Thompson 1995).

The coming of rail transportation introduced many new settlers to the banks of the Mojave River. Having federal grants of huge land holdings, the railroads began to engage in the real estate business on a scale never seen before. The AT&SF Railroad, with large holdings in the Victor Valley, promoted the township of Hesperia and throughout the 1880s land speculators throughout the valley feverishly bought and sold lots, tracts, townships and dreams. It is estimated that the population of Victor Valley multiplied up to five times before the boom ended. A decade later large development companies and individual real estate agents had inherited the role of town organizers, although they were never quite as successful as the railroad companies had been (California Historic Route 66 Association 1996).

In 1912, developer Arthur E. Hull arrived in the valley and immediately perceived the agricultural potential of the area. He quickly established the Apple Mesa Development Company, as well as other development companies throughout Victor Valley. With the help of Los Angeles newspaperman Max Ihmsen, the pair promoted and advertised the sale of land in the region across the nation and the AT&SF Railroad gave away more than 300,000 apple trees to land buyers during 1913 and 1914 alone. It is estimated that growers were now earning between \$350-\$500 per acre of apples a year. In 1916 the state and federal government authorized the Victor Valley Water Project; soon afterward, Hull and his associates put up \$2.5 million for the Arrowhead Reservoir and Power Company. Victor Valley had reached unprecedented levels of production and looked as if it would soon rival the other agricultural centers of Southern California. However, the onset of World War I in 1917 quickly reversed the industrious work of Arthur Hull and his contemporaries. Many young men who had made up the majority of the new homesteaders and skilled laborers enlisted in the Army and left Victor Valley for good. The region quietly slumped back into its previous state of desert guest ranches and small mining operations (California Historic Route 66 Association 1996).

In 1915, E.H. Richardson, the inventor of the Hotpoint Electric Iron, sold his patent and bought land for \$75,000 in the area of what is now the city of Adelanto. Richardson had planned to develop one of the first master-planned communities in Southern California. He subdivided the land into one-acre plots to be sold to veterans with respiratory ailments suffered during World War I. Along with this plan he hoped to build a respiratory hospital. Although Richardson's dreams were never fully realized, his planning laid the foundation for the establishment of the City of Adelanto. Much like its neighboring cities, Adelanto grew acres of deciduous fruit trees. These orchards, famous for their fresh fruits and cider, thrived until the Depression. Later, they were replaced by poultry farms. In early 1941, as the war time emergency developed, the Victorville Army Air Field was established (City of Adelanto 2006). Constructed between 1941 and 1943 as the Air Corps Advanced Flying school, on April 23, 1943, it was renamed Victorville Army Airfield (California Military Museum 2018). By 1950, after the formation of the U.S. Air Force as a separate branch of the military, the base was renamed as George Air Force Base in honor of the late Brigadier General Harold H. George (California Military Museum 2018, City of Adelanto 2006). The Tactical Air Command took over the base in November 1951, and George Air Force Base became the first

supersonic base with the arrival of F-100s in mid-1954. The base was decommissioned in December 1992 (California Military Museum 2018). In 1994, the base was repurposed as the Southern California Logistics Airport and as an industrial park (City of Victorville 2018).

It was not long before modern tract homes began to replace the old homesteader shacks. Schools, hospitals, churches, hotels, and shopping centers soon followed. The interstate freeways built in the 1950s and 1960s contributed to the area's growth and allowed workers to commute to jobs in the San Bernardino Valley or in Riverside. The desert communities of Hesperia, Victorville, and Adelanto have experienced unprecedented growth in recent years because of the opportunities offered by cheaper housing. This has led to an increase of commuter traffic from Victor Valley to the Los Angeles basin in the south.

#### 3.0 METHODS

#### 3.1 Personnel Qualifications

All phases of the cultural resources investigation were conducted or supervised by Registered Professional Archaeologist (RPA) Dr. Roger Mason, who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeologist. Staff Archaeologist Robert Cunningham served as the Field Director and prepared this report along with Senior Archaeologist Wendy Blumel, RPA. Additional Field crew members included Steven Wintergerst, Ryan Tubbs, and John, O'Conner, RPA.

Dr. Mason has been professionally involved with cultural resources management in California since 1983. Dr. Mason is the author of more than 200 reports dealing with cultural resource surveys, evaluations, and mitigation programs in California. He has extensive project experience with the cultural resources requirements of CEQA and Section 106 of the NHPA.

Mr. Cunningham is a Staff Archaeologist for ECORP and has more than 10 years of experience in cultural resources management, primarily in Southern California. He holds a BA degree in Anthropology and has participated in and supervised numerous survey, testing, and data recovery excavations for both precontact and historical sites, and has cataloged, identified, and curated thousands of artifacts. He has conducted evaluations of cultural resources for eligibility for the NRHP and CRHR.

Ms. Blumel has 10 years of experience in cultural resource management and meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeologist. She is experienced in the organization and execution of field projects in compliance with Section 106 of the NHPA and CEQA. She has contributed to and authored numerous cultural resources technical reports, research designs, and cultural resource management plans, and has contributed to a variety of environmental compliance documents.

#### 3.2 Records Search Methods

A cultural resources records search was conducted in March 2018 at the South Central Coastal Information Center (SCCIC), located at California State University, Fullerton. The purpose of the records search was to determine the extent of previous cultural resources investigations and the presence of previously-recorded archaeological sites or historic-period (i.e., more than 50 years in age) resources

within a one-mile (1600-meter) radius of the Project APE. Materials reviewed included reports of previous cultural resources investigations, archaeological site records, and listings of resources on the NRHP, California Register CRHR, California Points of Historical Interest, California Landmarks, and National Historic Landmarks.

#### 3.3 Archival Research Methods

Focused archival research was carried out by Senior Archaeologist Wendy Blumel and Staff Archaeologist Robert Cunningham. ECORP conducted research utilizing newspaper articles, historical maps, historic aerial photography, the San Bernardino County Officer of the Assessor Property Information Management System, and GLO records held by the Bureau of Land Management (BLM).

The archival research resulted in sufficient information for ECORP to prepare an evaluation of the cultural resources in the Project APE.

Historic maps reviewed include:

- 1932 USGS Barstow, California (1:125,000-minute scale)
- 1934 USGS Barstow, California (1:125,000-minute scale)
- 1953 USGS San Bernardino, California (1:250,000 scale)
- 1956 USGS Adelanto, California (7.5-minute scale)
- 1956 USGS Helendale, California (7.5-minute scale)
- 1956 USGS Victorville, California (7.5-minute scale)
- 1956 USGS Victorville, California (15-minute scale)
- 1956 USGS Victorville NW, California (7.5-minute scale)

Historic aerial photos taken in 1952, 1968, 1994, 2005, 2009, 2010, 2012, and 2014 were also reviewed for any indications of property usage and built environment (Nationwide Environmental Title Research [NETROnline] 2018).

#### 3.4 Sacred Lands File Coordination Methods

A search of the Sacred Lands File by the NAHC in Sacramento, California, was requested by ECORP in April 2018. This search was requested to determine whether there are sensitive or sacred Native American resources in the vicinity of the Project APE that could be affected by the proposed Project. The NAHC was also asked to provide a list of Native American groups that have historic or traditional ties to the Project APE who may have knowledge about the Project APE. It should be noted that this does not constitute consultation in compliance with Senate Bill (SB) 18 or Assembly Bill (AB) 52. A copy of all correspondence between ECORP and the NAHC is provided as Attachment A.

### 3.5 Field Survey Methods

An intensive pedestrian survey was conducted for the entire 699-acre Project APE. The Project APE was examined for the presence of cultural artifacts and features by walking the entire approximately 699-acre Project APE, using parallel transects in 15-meter intervals. Notes and photographs were taken on the environmental setting and disturbances within the Project APE.

The initial field survey was conducted from April 16-23, 2018. This initial field survey consisted of an intensive systematic pedestrian survey of all Project components and alternatives. Engineering adjustments resulted in changes to the Project footprint, and crews returned to survey additions to the Project Area on July 31, September 27, October 15, November 5, and November 15, 2018. On July 13, 2018, an ECORP field crew conducted a field survey in additional areas resulting from alterations to the Gen-Tie components, and the addition of the Service Line component. On September 27 and October 15, 2018 an ECORP field crew returned to survey additions to the Solar Field Area Project component. On November 5, an ECORP field crew conducted a field survey of temporary impact areas along the Gen-Tie and on November 15, an ECORP field crew conducted a field survey of the proposed Gen-Tie laydown area.

Newly-discovered cultural resources were assigned a unique temporary number based on the Project name and the order in which they were found (i.e., HD-001). As appropriate, the site boundary, features, and artifacts were mapped using Collector for ArcGIS, a cloud-based geospatial software with 2-5-meter accuracy, with data later post-processed for submeter accuracy. Digital photographs were taken of select artifacts and features as well as general site overviews showing the general environment and the presence, if any, of human or naturally-occurring impacts. Following fieldwork, Department of Parks and Recreation (DPR) 523 records were prepared for each of the resources identified and location and sketch maps were created using data collected with the Collector ArcGIS application used in the field.

## 3.6 Subsurface Testing Methods

Test excavation occurred on May 21, 23, and 24, 2018. The purpose of subsurface testing was to determine whether significant subsurface deposits were present at two pre-contact age sites (P36-003618 and P36-010952). If the results of the test program showed that that the sites have the potential to yield additional information that could be used to address the research questions listed in Section 5.3, the sites would be eligible for the CRHR and NRHP. The following excavation procedures were followed during subsurface testing of P36-003618 and P36-010952:

- The test program only utilized surface documentation and shovel test pit (STP) testing strategies. No formal test units were excavated;
- STPs were placed judgmentally within sites, depending on the site size and surrounding landscape, in order to test for presence or absence of subsurface deposits;
- Test excavations did not affect site integrity or eligibility;
- STPs consisted of 50-centimeter diameter units excavated in 20-centimeter levels;

- If sterile, STPs were excavated to a depth of at least 40 centimeters below the ground surface (cmbs);
- If subsurface deposits were identified, STPs excavation continued until two sterile levels were excavated or hardpan was reached;
- Characteristics, such as soil texture, color, disturbance, and the presence or absence of artifacts, were noted on an STP form. Depths were recorded as centimeters below surface (cmbs) and all soil was screened through a 1/8-inch mesh screen and backfilled upon completion;
- Subsurface materials, if present, were recorded, photographed if appropriate, and reburied in the level from which they came;
- No artifacts were collected;

The locations of all STPs were recorded using Collector for ArcGIS and a submeter accurate Global Navigation Satellite System receiver. Photographs were taken of each STP prior to excavation to document the surface, and again at unit termination, prior to backfilling. All screened soil was collected on tarps and used to backfill the STP upon completion.

#### 4.0 RESULTS

00428

01051

#### 4.1 Records Search Results

Simpson, and Larry E.

Burgess

Geoscientific Systems and

Consulting

Table 3. Previous Cultural Studies In or Within One Mile of the Project APE

The records search consisted of a review of previous research and literature, records on file with the SCCIC for previously recorded resources, and historical aerial photographs and maps of the vicinity.

The records search indicated that 53 cultural resources investigations were conducted within a one-mile radius of the Project APE between 1967 and 2014. Of these, 14 cultural resources investigations overlapped portions of the Project APE. Details of all 53 investigations are presented in Table 3.

Report Number	Author(s)	Report Title	Year	Includes Portion of the APE <sup>1</sup> ?
00078	Walker, Clifford	Life and Adventure Along the Mojave River Trail	1967	No
00166	San Bernardino County Museum Association	Archaeological Survey of the Mojave River Aqueduct and Recharge Areas	1973	Yes
00257	San Bernardino County Museum Association	Archaeologic and Paleontologic Assessment: Wastewater Facilities from Victorville	1975	No
	Hearn, Joseph E., Ruth D.	Archanological Pagauraga Majaya Water Archay Project No. C.06		

Archaeological Resources, Mojave Water Agency, Project No. C-06-

0822. Victorville Area

Final Report: Archaeological/Historical Assessment of George Air

Force Base

1976

1980

Nο

No

Table 3. Previous Cultural Studies In or Within One Mile of the Project APE

Report Number	Author(s)	Report Title	Year	Includes Portion of the APE <sup>1</sup> ?
01646	Norwood, Richard H.	A Cultural Resource Survey for Add/Alter Boundary Fence, George AFB, CA	1987	No
01734	Shackley, M. Steven, Rebecca McCorkle Apple, Jan Wooley, and Robert E. Reynolds	Cultural and Paleontological Resources Survey: US Sprint Fiber Optic Cable Project, Rialto, California to Las Vegas, Nevada	1987	Yes
01851	Murray, John	Archaeological Resource Assessment Completed for a 350+/- Acre Proposed Runway Construction Project on George Air Force Base, Victorville, California	1989	No
02511	Sundberg, Frederick A., and Nancy Whitney- Desautels	Archaeological and Paleontological Survey for a Three-Quarter Mile Segment of the National Trails Highway, San Bernardino County, California	1992	No
02570	Sheets Robert, and Craig Woodman	Archaeological Survey and Inventory of George Air Force Base, California	1990	No
02644	Yohe II, Robert M., and Robert E. Parr	An Archaeological Inventory of the Oro Grande Sewer Pipeline Alignment, Victorville, San Bernardino County, California	1992	No
02735	Yohe II, Robert M.	Archaeological Test Excavations Along the Oro Grande Sewer Pipeline Alignment, Victorville, San Bernardino County, CA	1993	No
02854	Cunkelman, Sarah C., and John R. Murray	Cultural Resource Report for the Exchange of P & V Enterprise Selected Public Lands (& Appendices)	1993	Yes
03025	Parr, Robert E.	An Archaeological Assessment of 50 Acres of Public Land Proposed for Exchange (Exchange ID: BLM Serial #CACA 35035) North of Adelanto, San Bernardino County, CA	1995	No
03784	Earth Tech	Cultural Resource Investigation for the Rail Alignment Property & TCE Property at George AFB, San Bernardino County CA	1997	No
03796	McKenna, Jeanette A.	An Intensive Archaeological Survey of the Victor Valley Regional Wastewater Reclamation Plant Expansion Areas, Victorville, San Bernardino County, CA	1998	No
03797	McKenna, Jeanette A.	A Report on Archaeological Monitoring Activities at the California Bio-Mass, Inc. Project Area in Victorville, CA	2000	No
03799	Self, William	Cultural Resource Assessment of High Desert Power Project, Victorville, San Bernardino County, CA	1999	Yes
04228	Alexandrowicz, John Stephen	An Historical Resources Investigation of Tentative Parcel Map 16175, Community of Phelan, San Bernardino County, California	2003	No
04427	Dahdul, Miriam	Historical/Archaeological Resources Survey Report: Southern California Logistics Airport Specific Plan Amendment & Rail Service Project in the City of Victorville, San Bernardino County, CA	2003	Yes
04428	Love, Bruce	Identification & Evaluation of Historic Properties: Southern California Logistics Airport Runway 17/35 Extension to 15000 Feet, City of Victorville, San Bernardino County, CA	2001	No

Table 3. Previous Cultural Studies In or Within One Mile of the Project APE

Report Number	Author(s)	Report Title	Year	Includes Portion of the APE¹?
04429	Wetherbee, Matthew	Historical/Archaeological Resources Survey Report: Victor Valley Wastewater Reclamation Authority Regional Plant Expansion Project in the City of Victorville, San Bernardino County, CA	2004	No
04430	Dahdul, Miriam	Identification & Evaluation of Historic Properties: Aircraft Storage & Maintenance Facility Project, Southern California Logistics Airport, Victorville, San Bernardino County, CA	2003	No
04437	Self, William	Waterline Construction Corridor Survey	2001	No
04442	McKenna, Jeanette A.	Results of a Paleontological & Archaeological Monitoring Program Along a Portion of Shay Road, Victorville, San Bernardino County, CA	2002	No
04446	McKenna, Jeanette A.	CA-SBR-72 Site Review	2003	No
04447	Woodward, Craig, and Roger Hatheway	George AFB, CA: WWII Building/Facilities Architectural & Historic Evaluation Study. 3 Volumes	1991	No
05055	Lerch, Michael K.	Cultural Resources Inventory and Evaluation of the Mojave River Pipeline Project, Phelan to Minneola, San Bernardino County, California	1998	Yes
05116	William Self Associates	Cultural Resources Assessment of the Southwest Gas Corporation Pipeline for the High Desert Power Project, San Bernardino County, California	1998	Yes
05204	McKenna	Completion of the VVWRA Archaeological/Paleontological Monitoring Program	2005	No
05205	McKenna	Archaeological Investigations and Mitigation of Impacts to CA-SBR-72, a Prehistoric Archaeological Site Adjacent to the California Bio Mass Inc. Facility, Victorville, San Bernardino County, California	2005	No
05435	Not Available	Cultural Resources Technical Report Groundwater Wells, Mojave Water District FEMA-1577-DR-CA, PW #560	2006	No
05440	McKenna, Jeanette A.	Proposed Improvements and Restoration of Mojave River Bank at Well Site, VVWRA	2007	No
05505	Ahmet, Koral	Cultural Resources Inventory of a 15-Acre Parcel (APN 0460-161-34) North of the City of Adelanto, San Bernardino County, California	2007	Yes
05508	Estes, Allen, James Allan, and William Self	Final Cultural Resources Report: High Desert Power Project, Victorville, San Bernardino County, California	2003	No
05862	CRM Tech	Archaeological and Paleontological Monitoring of Earth-Moving Activities, Oro Grande Project, Victorville, San Bernardino County, California	2007	No
05863	William Self Associates	Archaeological Survey of the Potable Water Line, Victorville 2 Hybrid Power Project, Victorville, CA	2007	No
06005	Tang, Bai "Tom" and Michael Hogan	Victor Valley Wastewater Reclamation Authority Administration Building Project, City of Victorville, San Bernardino County, California	2008	No

Table 3. Previous Cultural Studies In or Within One Mile of the Project APE

Report Number	Author(s)	Report Title	Year	Includes Portion of the APE <sup>1</sup> ?
06132	Strother, Eric, Marin Pilloud, Allen Estes, James Allan, and William Self	Report on Construction Monitoring Kern River High Desert Lateral Pipeline Project, San Bernardino County, California	2002	Yes
06201	Tang, Bai "Tom" and Michael Hogan	Identification and Evaluation of Historic Properties, Mojave River Weed Eradication Project, Victorville Area, San Bernardino County, California	2008	No
06395	Allan, James M., Kyle Kearney, Jenni Price, and Adam Marlow	Cultural Resources Assessment Report KMEP Calnev 8" Mainline Inspection Colton to Barstow and Barstow to Bracken, San Bernardino County, California and Clark County, Nevada, 18 Anomalies	2005	No
06504	Lerch, Michael K.	Class III Cultural Resource Inventory of the Mojave River Pipeline Project, Phelan to Minneola, San Bernardino County, California	1994	Yes
06514	Lerch, Michael K.	Reach 1A Addendum: Class III Cultural Resources Inventory of the Mojave River Pipeline Project, Phelan to Minneola, San Bernardino County, California	1996	No
07025	Garrison, Andrew	Phase I Cultural Resource Assessment for the Proposed East Side Electrical Infrastructure	2010	No
07026	Sander, Jay	Archaeological Survey Report for Southern California Edison's Equipment Replacement Project: Oro Grande, San Bernardino, California	2010	No
07120	Wetherbee, Matthew	Phase I Archaeological Assessment for Various Water Projects in the City of Victorville, San Bernardino County, California	2009	Yes
07121	Baker, Cindy L., and Mary L. Maniery	Cultural Resources Inventory and Evaluation of U.S. Army Reserve 63 <sup>rd</sup> Regional Readiness Command Facilities	2007	No
07706	McKenna, Jeanette A.	Archaeological/Paleontological Monitoring Program, VVWRA Expansion	2006	No
07863	Tang, Bai "Tom"	Due-Diligence Cultural Resources Study: Oro Grande Lift Station Wet Well Vertical Screen Project, City of Victorville, San Bernardino County, California	2014	No
07953	Estes, Allen, Thomas Young, Nazih Fino, Aimee Arrigoni, Eric Strother, and James Allan	Cultural Resource Assessment Report Victorville 2 Hybrid Power Project San Bernardino County, California	2007	Yes
07960	Self, William	Class III Cultural Resources Survey Addendum for the Proposed Calnev Expansion Project, California Portion San Bernardino County, California	2010	Yes
07969	Wetherbee, Matthew	Phase I Archaeological Assessment for Various Water Projects in the City of Victorville San Bernardino County, California	2009	No

Table 3. Previous Cultural Studies In or Within One Mile of the Project APE Includes Report Portion **Report Title** Author(s) Year Number of the APE<sup>1</sup>? Cultural Resources Assessment of Five Parcels (APN 0460-232-31, 08096 Dietler, John 0460-232-38, 0460-242-18, 0460-242-20, and 0460-242-26). 2009 Yes Victorville 2 Hybrid Power Project, San Bernardino County, California

The records search also determined that two previously recorded pre-contact resources, 21 historic-period resources, and one multi-component (both pre-contact and historic-period) resource were recorded within the Project APE. Pre-contact period resources are comprised of one lithic scatter and one isolated find consisting of a single projectile point. Historic-period resources consist of five refuse deposits, and 16 homesites. Of the 16 homesites, 14 consist of structure foundations with associated refuse deposits, and two contain collapsed structures with associated refuse deposits. The multi-component resource consists of a pre-contact temporary campsite comprised of a lithic scatter and fire-affected rock (FAR), and historic-period structures. In addition to the 24 previously recorded resources located within the Project APE, an additional 66 resources have been previously recorded within a one-mile radius of the Project APE. These resources are comprised of 26 pre-contact resources, 38 historic-period resources, and two multi-component sites. Details of these resources are provided below in Table 4.

Table 4. Previously Recorded Cultural Resources In or Within One Mile of the Project APE							
Site Number CA- SBR-	Primary Number P-36-	Recorder and Year	Age/ Period	Site Description	Within Project APE?		
N/A	000069	Bierman, Mohr (1949)	Pre- contact	Small area of midden accumulation	No		
0072	000072	Bierman, Mohr (1949); G. Smith and L. Burgess (1963, 1976); Philip J. Wilke (1979); Knox Mellon (1981); Stephen D. Mikesell (1982); William D. Seidel (1991); Jeanette A. McKenna (2000, 2006)	Pre- contact	Quarry/Village/Mojave River Footprints	No		
2734	002734	James Baldwin (1978)	Pre- contact	Campsite	No		
3005	003005	James Baldwin (1978)	Pre- contact	Lithic scatter	No		
3006	003006	J. Baldwin (1978), G.	Pre-	Campsite	No		

<sup>&</sup>lt;sup>1</sup>APE = Area of Potential Effects

Site Number CA- SBR-	Primary Number P-36-	Recorder and Year	Age/ Period	Site Description	Within Project APE?
		Smith (n.d.)	contact		
3007/H	003007	James Baldwin (1978)	Both	Lithic scatter, historic basement and refuse deposit	No
3008	003008	James Baldwin	Pre- contact	Lithic scatter	No
3033/H	003033	Numerous (1988-2014)	Both	Mojave Trail/Old Government Road	No
3618/H	003618	J. Baldwin (1978)	Both	Campsite and historic structures	Yes
5433	005433	W.M. Childers (1980); R. Sheets (1990)	Pre- contact	Quarry	No
6153	006153	R. Reynolds (1977)	Pre- contact	Campsite	No
7154H	007154	Richard Osborne, et al. (1992)	Historic	Refuse deposit	No
7155	007155	Richard Osborne, et al. (1992)	Pre- contact	Campsite	No
8831H	008831	Earth Tech (1997)	Historic	Fence line	No
8832H	008832	Earth Tech (1997)	Historic	Refuse deposit	No
8833H	008833	Earth Tech (1997)	Historic	Refuse deposit	No
8834H	008834	Earth Tech (1997)	Historic	Refuse deposit	No
8835H	008835	Earth Tech (1997)	Historic	Refuse deposit	No
8837H	008837	Earth Tech (1997)	Historic	Fallen structure and refuse deposit	No
8838H	008838	Earth Tech (1997)	Historic	Refuse deposit	No
8839H	008839	Earth Tech (1997)	Historic	Refuse deposit	No
8840H	008840	Earth Tech (1997)	Historic	Refuse deposit	No
8841H	008841	Earth Tech (1997)	Historic	Refuse deposit	No
8842H	008842	Earth Tech (1997)	Historic	Refuse deposit	No
8843H	008843	Earth Tech (1997)	Historic	Refuse deposit	No
8859H	008859	Carrie D. Wills (1997); Daniel Ballester (2002)	Historic	Refuse deposit	No
8860H	008860	Carrie D. Wills (1997)	Historic	Refuse deposit	No
10306H	010306	Adrian Sanchez Moreno (2001)	Historic	Structural remains and refuse deposit	No
4000717	0.1000=			- 4	

Refuse deposit

No

Historic

10307H

010307

Adrian Sanchez Moreno

Table 4. Previously Recorded Cultural Resources In or Within One Mile of the Project APE							
Site Number CA- SBR-	Primary Number P-36-	Recorder and Year	Age/ Period	Site Description	Within Project APE?		
		(2001)					
10882H	010882	Daniel Ballester, et al. (2002)	Historic	Refuse deposit	No		
10884H	010884	Daniel Ballester, et al. (2002)	Historic	Refuse deposit	No		
10886H	010886	Daniel Ballester, et al. (2002)	Historic	Refuse deposit	No		
10887H	010887	Daniel Ballester and Michael I Lozano (2002)	Historic	Refuse deposit	No		
10888H	010888	Daniel Ballester and Michael I Lozano (2002)	Historic	Refuse deposit	No		
10889H	010889	Daniel Ballester and Michael I Lozano (2002)	Historic	Well	No		
10946H	010946	Daniel Ballester (2003)	Historic	Refuse deposit	No		
10947H	010947	Rachel Dilthy (2003)	Historic	Refuse deposit	No		
10948H	010948	Daniel Ballester (2003)	Historic	Refuse deposit	No		
10949H	010949	Daniel Ballester (2003)	Historic	Refuse deposit, two well shafts, reservoir	No		
10950H	010950	Daniel Ballester (2003)	Historic	Refuse deposit	No		
10951H	010951	Michael Lozano (2003); Allen Estes and Thomas Young (2006)	Historic	Refuse deposit	Yes		
10952	010952	Daniel Ballester (2003)	Pre- contact	Lithic scatter	Yes		
10957	010957	John J. Eddy (2003)	Pre- contact	Lithic scatter, fire hearth	No		
N/A	012917	PAR Environmental Services (2006)	Historic	George AFB Ready Alert Hangers	No		
N/A	021262	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit	Yes		
N/A	021263	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit	Yes		
N/A	021264	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021265	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021266	Allen Estes and Thomas	Historic	Refuse deposit and structure foundation	Yes		

Table 4. Previously Recorded Cultural Resources In or Within One Mile of the Project APE							
Site Number CA- SBR-	Primary Number P-36-	Recorder and Year	Age/ Period	Site Description	Within Project APE?		
		Young (2006)					
N/A	021267	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021268	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021269	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021270	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021271	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No		
N/A	021272	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021273	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021274	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021275	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021276	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021277	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021278	Allen Estes and Thomas Young (2006); Allen Estes (2007)	Historic	Refuse deposit, remains of wood framed house and privy	Yes		
N/A	021279	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No		
N/A	021280	Allen Estes and Thomas Young (2006); Allen Estes (2007)	Historic	Refuse deposit, and remains of a wood framed house, shed, and privy	Yes		
N/A	021281	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	Yes		
N/A	021282	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit	Yes		
N/A	021283	Allen Estes and Thomas Young (2006); Allen Estes (2007)	Pre- contact	Lithic scatter	No		

Table 4. Previously Recorded Cultural Resources In or Within One Mile of the Project APE					
Site Number CA- SBR-	Primary Number P-36-	Recorder and Year	Age/ Period	Site Description	Within Project APE?
N/A	021293	Allen Estes and David Buckley (2007)	Historic	Refuse deposit	Yes
N/A	021294	Allen Estes and David Buckley (2007)	Historic	Refuse deposit	No
N/A	021295	Allen Estes and David Buckley (2007)	Historic	Refuse deposit	No
N/A	021296	Allen Estes and David Buckley (2007)	Historic	Refuse deposit	No
N/A	021622	Jeremy Hollins (2008)	Historic	Farm/Ranch complex	No
N/A	021623	Jeremy Hollins (2008)	Historic	Farm/Ranch complex	No
16313H	025787	Jeanette A. McKenna (2012)	Historic	George Air Force Base	No
N/A	026888	Daniel Ballester (2003)	Pre- contact	Isolated find-ground stone	No
N/A	026889	Daniel Ballester (2003)	Pre- contact	Isolated find-lithic flake	No
N/A	026890	Daniel Ballester (2003)	Pre- contact	Isolated find-lithic flake	No
N/A	026891	Daniel Ballester (2003)	Pre- contact	Isolated find-projectile point	Yes
N/A	026892	Daniel Ballester (2003)	Pre- contact	Isolated find-lithic flake	No
N/A	026893	Daniel Ballester (2003)	Pre- contact	Isolated find-lithic flake	No
N/A	026894	Daniel Ballester (2003)	Pre- contact	Isolated find-lithic flake	No
N/A	026898	Adrian Sanchez Morena and Daniel Ballester (2001)	Pre- contact	Isolated find-lithic flake	No
N/A	026899	Adrian Sanchez Morena and Daniel Ballester (2001)	Pre- contact	Isolated find-lithic flake	No
N/A	026900	Adrian Sanchez Morena and Daniel Ballester (2001)	Pre- contact	Isolated find-ground stone fragment	No
N/A	061278	R. Sheets (1990)	Pre- contact	Isolated find-tested cobble	No
N/A	061279	R. Sheets (1990)	Pre-	Isolated find-tested cobble	No

Table 4. P	Table 4. Previously Recorded Cultural Resources In or Within One Mile of the Project APE					
Site Number CA- SBR-	Primary Number P-36-	Recorder and Year	Age/ Period	Site Description	Within Project APE?	
			contact			
N/A	061280	R. Sheets (1990)	Pre- contact	Isolated find-lithic tool	No	
N/A	061281	R. Sheets (1990)	Pre- contact	Isolated find-tested cobble	No	
N/A	061298	Earth Tech (1997)	Pre- contact	Isolated find-projectile point	No	
N/A	061299	Earth Tech (1997)	Historic	Wood post marker	No	
N/A	061300	Earth Tech (1997)	Pre- contact	Isolated find-hammerstone	No	

# 4.2 Archival Research Results

A review of the historic-period maps and historic aerial photographs indicates the Project APE was located in an undeveloped area in the early twentieth century. USGS maps from the early twentieth century show the area as undeveloped desert. The Mojave River, the community of Oro Grande, and the AT&SF Railroad are depicted east of the Project APE. The community of Adelanto is shown to the southwest, and Victorville is depicted south of the Project APE. An unnamed unimproved road is shown following the same alignment as present-day Helendale Road (USGS 1932, 1934). On the 1953 USGS 1:250,000 San Bernardino, California map, George Air Force Base is depicted immediately southwest of the Project APE. On the 1956 USGS 7.5-minute Helendale, California map, several structures are depicted within the Project APE, situated along unnamed, unpaved roads.

Historic aerial photographs from 1952 shows the Project APE as undeveloped desert. An unpaved road following the same alignment as Helendale Road is visible. Agricultural fields are visible east of the Project APE, along the western banks of the Mojave River. George Air Force Base is visible immediately southwest of the Project APE. In aerial photographs from 1968, several structures situated along unpaved roads are visible within the Project APE. The agricultural fields east of the Project APE appear to be abandoned, and George Air Force Base shows an expansion of facilities and the extension of several runways. In 1994 aerial photographs, structures within the Project APE appear to be occupied. The property surrounding the structures is cleared and vehicles are visible parked near structures. In 2005 Aerial Photographs, several properties appear to be abandoned. The property around several structures appears overgrown and dumping is evident. By 2014, all structures within the Project APE appear abandoned, and several appear to have collapsed.

## 4.3 Sacred Lands File Results

The results of the search of the Sacred Lands File by the NAHC did not indicate the presence of any Native American Sacred Lands within the Project APE. The NAHC also provided a list of seven Native American groups that have historic or traditional ties to the Project APE who may have knowledge about the Project APE. It should be noted that this does not constitute consultation in compliance with SB 18 or AB 52 or Section 106. A copy of all correspondence between ECORP and the NAHC is provided as Attachment A.

### 4.4 Field Visit Results

Ground visibility within the Project APE was generally very good, ranging from 90-95 percent. However, there were areas of concentrated modern dumping within the Project APE. These areas contained large piles of modern trash and construction debris in which ground visibility was extremely poor, ranging from 0-15 percent. These areas constituted less than five percent of the entire Project APE. Other disturbances include off-highway vehicle activity, recreational shooting, and seasonal flooding.

As a result of the field survey, 23 previously recorded sites and one previously recorded isolated find were updated, and 13 newly recorded sites and eight newly recorded isolated finds were identified and documented. The 13 newly recorded sites consist of 12 historic-period homesites and one historic-period refuse deposit. Of the eight newly recorded isolated finds, seven consist of historic-period refuse, and one consists of a pre-contact lithic flake. A DPR 523 record for each resource can be found in Attachment B.

# 4.4.1 Previously Recorded Resources

### CA-SBR-3618/P36-003618

This multi-component site was first recorded in 1978 by J. Baldwin and was described as a light scatter of jasper and chalcedony flakes and fire-affected rock. The original site record also notes the presence of bone associated with nearby historic-period structures. The site was revisited by ECORP archaeologists on April 17, 2018. The original site record does not go into any detail on the structures, only noting their presence near the pre-contact artifacts. Because the original site record only addressed the pre-contact portion of the site, and because the historic structures are located more than 150 meters from any pre-contact site constituents, the historic structures mentioned in the 1978 site record were recorded as a separate site (HD-008). Of the pre-contact component of the site, the crew was able to locate one red jasper tertiary flake. The crew was not able to locate the three additional flakes or the FAR recorded in the original site record.

#### CA-SBR-10951H/P36-010951

This historic-period site was first recorded on March 28, 2003 by M. Lozano of CRM Tech, and was described as a scatter of historic-era tin cans and sun-colored amethyst glass. The site was revisited by ECORP archaeologists on April 20, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

## CA-SBR-10952/P36-010952

The site is a pre-contact lithic scatter originally recorded in 2003 by D. Ballester of CRM Tech. The site was described as consisting of 12 quartzite flakes, one chalcedony flake, and one brown jasper flake. The site location was revisited by ECORP archaeologists on April 23, 2018. During this visit, the ECORP crew was unable to locate the site.

## P36-021262

This historic-period refuse deposit was first recorded in 2006 by A. Estes and T. Young of William Self Associates, Inc. (WSA) and was described as two separate concentrations of historic and modern trash. Both concentrations are described as containing historic-age cans and glass. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of association, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew was able to locate all site constituents and the condition of the site was found to be consistent with the previous site record.

#### P36-021263

This historic-period refuse deposit was first recorded on March 28, 2006 by A. Estes and T. Young of WSA and was described as a moderately dense scatter of historic artifacts containing approximately 100 artifacts including cans, ceramic fragments, glass fragments (including sun-colored amethyst glass, and a metal pail. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of association, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

### P36-021264

This historic-period site was first recorded on March 28, 2006 by A. Estes and T. Young of WSA and was described as a formed concrete foundation slab with an associated scatter of historic building materials and domestic refuse. Based on USGS maps, the 2006 study dates the site to between 1955 and 1989. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

#### P36-021265

This historic-period site consists of a concrete foundation and associated refuse deposit. The site was originally recorded in 2006 by A. Estes and T. Young of WSA. The site is described as containing a formed slab concrete foundation with some wood framing still attached. The refuse deposit consists of a general

scatter of domestic refuse and building materials surrounding the slab. Based on USGS maps, the 2006 study dates the site to between 1952 and 1955. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The ECORP crew was able to locate all site constituents. At the time of the visit, it was noted that the northern portion of the concrete foundation has become increasingly cracked and fragmented. All other aspects of the site are consistent with the 2006 site record.

#### P36-021266

This historic-period site was first recorded on March 28, 2006 by A. Estes and T. Young of WSA, and was described as a concrete foundation slab with an associated scatter of historic material. The site is described as containing a formed slab concrete foundation with a diffuse artifact scatter containing domestic refuse and building materials surrounding it. In addition, a concentration of step ladder fragments and wood fencing is noted to the south of the slab. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of datable artifacts or features, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

### P36-021267

This historic-period site was first recorded on March 28, 2006 by A. Estes and T. Young of WSA and was described as a concrete foundation slab with an associated scatter of historic material. The site is described as containing a formed concrete slab with an attached porch step on the eastern side. The artifact scatter consists of diffuse domestic refuse surrounding the foundation and an unpaved access road leads to the slab from the northeast. Based on USGS maps and aerial photographs, the study dates the site to between 1955 and 1989. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

### P36-021268

This historic-period site was first recorded on March 28, 2006 by A. Estes and T. Young of WSA and was described as a concrete foundation slab with an associated scatter of historic material. Wooden framing was still attached to the southern side of the concrete slab and the artifact scatter contains building materials and domestic refuse. Based on USGS maps, the study dates the site to between 1952 and 1989. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

#### P36-021269

This historic-period site was first recorded on March 28, 2006 by A. Estes and T. Young of WSA and was described as a concrete foundation slab with an associated scatter of historic material. Lag bolts are embedded along the edges of the foundation. The artifact scatter contains household items and construction materials. WSA could not identify the construction date. As part of a 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

#### P36-021270

This historic-period site was first recorded on March 29, 2006 A. Estes and T. Young of WSA and was described as a concrete foundation slab with an associated scatter of historic material. A remnant of the wood frame is affixed to the concrete slab by lag bolts along all four edges of the foundation. The artifact scatter contains household items and construction materials, and a dirt access road runs east-west approximately 10 feet north of the foundation. WSA could not identify the construction date. As part of a 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

# P36-021272

This historic-period site consists of a concrete foundation and associated refuse deposit. The site was originally recorded in 2006 by A. Estes and T. Young of WSA. A remnant of the wood frame is affixed to the concrete slab by lag bolts along all four edges of the foundation, and the remains of a couch is located on the foundation. The artifact scatter consists of household items and construction materials. Based on USGS maps, the study dates the site to between 1952 and 1989. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 17, 2018. The ECORP crew was able to locate all site constituents. At the time of the visit, it was noted that the couch mentioned in the original site record is no longer present. All other aspects of the site are consistent with the 2006 site record.

## P36-021273

This historic-period site was originally recorded in 2006 by A. Estes and T. Young of WSA and was described as a concrete foundation and moderate refuse scatter. The foundation is highly weathered. The

artifact scatter surrounding and partially covering the foundation consists of domestic refuse and construction materials. WSA could not identify the construction date. As part of a 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 17, 2018. The ECORP crew was able to locate all site constituents. The field crew noted that the refuse deposit is a sparse, light deposit of refuse. All other aspects of the site are consistent with the 2006 site record.

### P36-021274

This historic-period site was first recorded on March 29, 2006 by A. Estes and T. Young of WSA and was described as a concrete foundation slab with an associated scatter of historic material. A remnant of the wood frame is affixed to the concrete slab by lag bolts along all four edges of the foundation. A concrete entry pad is attached along the northeaster edge of the foundation. The artifact scatter surrounding and partially covering the foundation consists of domestic refuse and construction materials. Based on USGS maps, the study dates the site to before 1952. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

### P36-021275

This historic-period site was first recorded on March 29, 2006 by A. Estes and T. Young of WSA and was described as two adjacent concrete foundation slabs with an associated scatter of historic material. The main house foundation slab has lag bolts embedded along the edges, and a remnant of the wood frame is affixed to the slab by lag bolts along the northeastern edge of the foundation. A concrete entry pad is attached at the center of the eastern side of the foundation. The second slab is located near the northwestern corner of the main house foundation. This slab has a rough surface and no lag bolts are present. The artifact scatter surrounding the foundations consists of domestic refuse and construction materials. WSA could not identify the construction date. As part of a 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

### P36-021276

This historic-period site was first recorded on March 29, 2006 by A. Estes and T. Young of WSA and was described as an L-shaped concrete foundation slab with an associated scatter of historic material. Lag bolts are embedded along all edges of the foundation. The artifact scatter consists of domestic refuse and construction materials. Artifacts are concentrated near the northern edge of the foundation, and an unpaved access road passes approximately 10 feet south of the foundation. WSA could not identify the

construction date. As part of a 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

#### P36-021277

This historic-period site was originally recorded in 2006 by A. Estes and T. Young of WSA and consists of two features and an associated refuse scatter. In the original site record, the features are described as a concrete foundation slab (Feature 1), and the remnant of an animal pen (Feature 2). Lag bolts are embedded along all edges of the foundation. A remnant of the wood frame is affixed by lag bolts to the southern and eastern sides of the slab. The animal pen is constructed with corrugated sheet metal embedded into the ground. The artifact scatter consists of domestic refuse and construction materials. Based on USGS maps and aerial photographs, the study dates the site to between 1952 and 1989. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The ECORP crew was able to locate all site constituents. The field crew noted that the sheet metal had been removed from the animal pen (Feature 2). All other aspects of the site are consistent with the 2006 site record.

# P36-021278

This historic-period site was first recorded on March 29, 2006 by A. Estes and T. Young of WSA, and was test excavated by WSA on September 26, 2007. The site was described as comprising two features: the burned remains of a wood-frame house and a wood-lined privy, with an associated scatter of historic material. The burned structural remains rest on an earthen foundation. The privy pit is lined with wood slats on three sides and is surrounded by the remains of the outhouse structure. The artifact scatter consists of domestic refuse and construction materials. Test excavation conducted on September 26, 2007 consisted of a test unit excavated over the eastern half of the privy feature. WSA could not identify the construction date. As part of a 2007 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 16, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

## P36-021280

This historic-period site was first recorded on March 29, 2006 by A. Estes and T. Young of WSA, and was test excavated by WSA on September 27, 2007. The site was described as comprising three features: the burned remains of a wood-frame house, the possible remains of a privy, and the collapsed remains of a wood shed, along with an associated scatter of historic material. The house remains rest on an earthen

foundation. The privy remains consist of deep depression surrounded by wood boards that may represent the remains of the outhouse structure. The remains of a wood shed consists of wood board debris, including a doorframe and hinged door. The artifact scatter consists of domestic refuse and construction materials. The text excavation conducted in September 2007 consisted of a test unit excavated over the eastern half of the privy feature. WSA could not identify the construction date. As part of a 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 18, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with the previous site record.

#### P36-021281

This historic-period site was originally recorded in 2006 by A. Estes and T. Young of WSA. In the original site record, the site is described as the remains of a collapsed house and an associated refuse deposit. The foundation is nearly entirely covered with structural remains including wall framing, siding, roof framing, and plywood with asphalt shingles. The artifact scatter consists of domestic refuse and construction materials. Based on USGS maps and aerial photographs, the study dates the site to prior to 1952. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 19, 2018. The ECORP crew was able to locate all site constituents. At the time of the visit, the ECORP field crew identified an additional feature, a wood-lined well. The crew assigned feature numbers and recorded feature locations. Feature 1 is the collapsed house. The condition of this feature is consistent with the description in the 2006 site record. Feature 2 is a rectangular wood-lined well. The well measures three feet north-south by 4 feet east-west. The walls are lined with 1-x-4-inch horizontal slats attached to 2-x-6-inch vertical beams. The eastern wall has partially collapsed, and wood, debris and sediments have partially filled the shaft. The current depth of the shaft is 4 feet, seven inches.

#### P36-021282

This historic-period site was first recorded on March 29, 2006 by A. Estes and T. Young of WSA, and was described as a dense scatter of historic artifacts. The artifact scatter consists of domestic refuse. A dirt road crosses the southern portion of the site. WSA could not identify the source of the dumped materials or establish an association with a residential property. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 20, 2018. The crew located all site constituents, and the condition of the site was found to be consistent with previous site record.

### P36-021293

This historic-period site was originally recorded in 2006 by A. Estes and D. Buckley of WSA and was described as a light scatter of historic cans and one concentration of cans. The site record indicates the presence of a modern refuse deposit southwest of the site. WSA could not identify the source of the dumped materials or establish an association with a residential property. As part of the 2006 study, the site was evaluated and found not eligible for the CRHR under any criteria due to its lack of precisely datable artifacts, lack of research potential under Criterion 4, and lack of integrity (Estes et al. 2007).

The site was revisited by ECORP archaeologists on April 20, 2018 as part of a pedestrian survey. The ECORP crew was able to locate the modern refuse dump, but only three sanitary cans and one fragment of a sun-colored amethyst glass bottle was found in the site area. The area was heavily disturbed by off-highway vehicle traffic. The crew noted the presence of a gas line in the site area that is not mentioned in the original site record. It is possible that artifacts were displaced during installation of the gas line, off-highway vehicle activity, or erosional processes.

### P36-026891

This pre-contact isolated find was previously recorded in 2003 by D. Ballester of CRM Tech. The isolate was described as a crudely shaped projectile point made from an indeterminate material. The isolate location was revisited by ECORP archaeologists on April 20, 2018. During this visit, the ECORP crew was unable to locate the isolate.

# 4.4.2 Newly Recorded Resources

# HD-001-I

This historic-period isolated find consists of one colorless glass bottle base and twelve colorless glass bottle body fragments. The base and fragments are all from the same vessel - a colorless glass milk bottle. The base is embossed with the letters RJ and an Owens-Illinois Glass Company maker's mark with a 1937 date code. Two bottle body fragments refit and contain an applied color label reading [ROG]ER JESSUP / ...TIFIED MIL[K].

### **HD-002**

This historic-period site is a home site consisting of two features: a collapsed wood frame structure (Feature 1) and the remains of a privy (Feature 2). There is a light scatter of historic-period and modern refuse across the site.

Feature 1 is a collapsed wood frame structure. The feature consists of a concrete slab foundation measuring 20 feet 1 inch east-west by 20 feet 6 inches north-south. The remains of a wood frame structure have collapsed onto the foundation. The southern wall has collapsed northward onto the foundation, and a section of the roof rests on top of the collapsed wall section. The wall section contains spaces for two windows and one doorway. The wall is constructed of horizontal boards affixed to vertical beams. The roof is likewise constructed with two strips of tarpaper attached to the roof. Fragments of wall plaster are dispersed around the collapsed structure in an approximately 10-foot radius.

Feature 2 is the remains of a privy. The feature is located 73 feet northwest of Feature 1. The privy feature consists of a wood-lined hole and wooden structure debris. The hole measures 1 foot 9 inches north-south by 1 feet 5 inches east-west. Structural debris is located around and within the hole. Structural debris consists of 1x4 boards, tar paper, wire cut nails, and screws.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1956 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of Bureau of Land Management General Land Patents indicates that a five-acre plot of land containing this site was sold to Harvey Reginald Seston in 1957 (BLM 2018).

## HD-003-I

This historic-period isolated find consists of two matchstick-filler (MSF) cans. The cans are located approximately 50 feet apart on a gently sloping hill overlooking the Mojave River. The southernmost can measures 3 15/16 inches tall by 2 15/16 inches in diameter. The northernmost can measures 3 14/16 inches tall by 2 14/16 inches diameter. Both cans are heavily rusted and contain stamped ends and interlocking side seams.

### HD-006

This historic-period site is a home site consisting of two features: a partially collapsed house constructed of milled lumber and concrete masonry units (Feature 1) and a concrete and rock pad (Feature 2). There is a dense scatter of modern construction debris and household refuse across the site. This deposit may conceal historic-period refuse.

Feature 1 is a partially collapsed house constructed of milled lumber and concrete masonry units. The house is constructed on a t-plan. The central section and southern wing feature mixed wooden and masonry walls, with concrete masonry units comprising the base of all exterior walls up to a height of approximately three feet, above which the walls are constructed of 1x4 wood boards covered by vinyl siding. Walls on the northern wing consist of plywood sheets affixed to vertical 2x4 beams, suggesting that the northern wing may be a later addition to the original structure. The southern and northern wings have a flat roof with eaves, the western wing has a low-pitched roof slanting westward, and the central portion of the structure features a shed roof.

Feature 2 is a small foundation pad measuring 16 feet north-south by 13 feet east-west. The pad is constructed of concrete and contains several large rocks.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1956 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to Frank John Cryer in 1956 (BLM 2018).

### **HD-007**

This historic-period site is a single feature site consisting of a concrete foundation, the edges of which are lined with concrete masonry units. A partial exterior wall is located along the western edge of the foundation. The wall is constructed of concrete masonry units reinforced with rebar. The foundation is cracked. Wall plaster is scattered around the foundation, extending out in an approximately 6-foot radius. A dense deposit of refuse surrounds the feature consisting of historic-period and modern household refuse, and modern construction debris.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1956 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018).

#### HD-008

This historic-period site is a farm/home site consisting of five features. Features consist of two foundations (Features 1 and 3), the remains of an animal pen (Feature 2), a cistern (Feature 4), and a wooden platform on concrete masonry block piers (Feature 5). A moderate scatter of historic-period and modern refuse covers the site.

Feature 1 is a concrete slab foundation with attached footing boards. The slab measures 37 feet north-south by 27 feet east-west. Portions of the foundation are coated in red paint. The foundation is surrounded by plywood sheeting debris that may represent the original walls of the structure.

Feature 2 is the remains of probable animal pen. The feature consists of a cleared, rectangular area measure 26 feet north-south by 18 feet east-west. The cleared area is surrounded by wood posts, barbed wire, and chicken wire.

Feature 3 is a multi-layer concrete foundation. The edges of the foundation contain large rocks. A vertical metal pipe is encased by the foundation. The foundation measures 20 feet east-west by 15 feet north-south. The pipe measures 6 inches in diameter and extend 1 foot above the foundation.

Feature 4 is a concrete-lined rectangular subterranean vault or cistern. The feature measures 12 feet 6 inches north-south by 8 feet east-west. The opening of the feature measures 10 feet 11 inches north-south by 5 feet 2 inches east-west.

Feature 5 is a wood platform supported on concrete masonry block piers. The platform has an L plan. The platform measures 24 feet 6 inches north-south by 24 feet 8 inches east-west. The wood is weathered and warped and the entire feature is in a dilapidated state. Broken tiles and household items are scattered throughout the feature.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1956 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year

for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing the northern portion of the site was sold to William George Fuqua in 1960 and another five-acre plot containing the southern portion of the site was sold to Martin Wayne in 1956 (BLM 2018).

### HD-009-I

This pre-contact isolated find consists of one fine-grained metavolcanic flake. The artifact measures 5.1 centimeters by 4.6 centimeters by 1.0 centimeter thick. The artifact has four negative flake scars on the dorsal surface. The artifact was found on the surface within a creosote scrub environment.

#### HD-010

This historic-period site is a farm/home site consisting of seven features. Features consist of a partially collapsed wood frame house (Feature 1), a concrete Foundation (Feature 2) three concrete pads (Features 3, 4, and 5), a vertical metal pipe embedded in the ground (Feature 6), and a pit with an embedded concrete pipe (Feature 7). A scatter of modern and historic-period refuse is present throughout the site.

Feature 1 is a partially collapsed wood frame house with a concrete slab foundation. The eastern half of the structure has collapsed. The feature measures 32 feet east-west by 26 feet 9 inches north-south. The structure has a flat, tar paper-covered roof with eaves, and the exterior walls have plywood-emulated wood siding.

Feature 2 is a concrete foundation measuring 20 feet four inches north-south by 20 feet 2 inches east to west. Foundation anchor bolts are embedded within the concrete along the perimeter of the foundation.

Feature 3 is a concrete pad located approximately 6 feet west of Feature 2. The pad measures 6 feet north-south by 6 feet east-west. There are anchor bolts embedded in the concrete near the corners of the pad.

Feature 4 is a concrete pad located approximately 30 feet southeast of Feature 2. The pad measures 6 feet north-south by 6 feet east-west. A metal, vertical pipe with a 6-inch diameter extends up through the center of the pad.

Feature 5 is a concrete pad located approximately 15 feet south of Feature 4. The pad measures 8 feet 6 inches north-south by 8 feet 6 inches east-west. There is a 1-x-1-foot opening in the northern section of the pad. Metal footings are located at each corner of the pad. The pad is cracked, and portions of the foundation are uplifted. E.M.W. is etched into the concrete near the northern edge of the pad.

Feature 6 is an 8½-inch-diameter vertical metal pipe embedded into the ground between Features 4 and 5.

Feature 7 is a 5-foot-diameter pit located west of Feature 1. There is a concrete-encased 4-inch-diameter acrylonitrile butadiene styrene pipe located at the northwest edge of the pit.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1968 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as

undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to Stephen Hugh Cohen and Ella M. West in 1959 (BLM 2018).

### HD-011

This historic-period site is a farm/home site consisting of three features, a partially collapsed wood frame house (Feature 1), a concrete pad with an embedded metal pipe (Feature 2), and an earthen pit (Feature 3). A scatter of modern and historic-period refuse is present throughout the site.

Feature 1 is a partially collapsed wood frame house. The southern 1/3 of the structure rests on a thick concrete foundation, while the northern 2/3 of the structure is supported on concrete piers and wood beams. The southern portion of the structure has stucco walls, with the northern portion has plywood siding. The structure has a flat, tar paper covered roof with overhanging eaves. The structure measures 32 feet north-south by 28 feet east-west.

Feature 2 is a large earthen pit located north of Feature 1. The pit measures 14 feet east-west by 11 feet north-south and is a concrete pad with an  $8\frac{1}{2}$  -inch-diameter metal pipe encased in the center of the pad. The pad measures 6 feet north south by 6 feet east-west. A modern pad is adjacent to the eastern edge of Feature 2. The modern pad has the date 1995 etched into the concrete.

Feature 3 is a large earthen pit located north of Feature 1. The pit measures 14 feet east-west by 11 feet north-south.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1956 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to Edward H. Buelow in 1957 (BLM 2018).

#### HD-012

This historic-period site is a farm/home site consisting two features. Features consist of a concrete foundation pad (Feature 1) and the remains of a wall (Feature 2) Burned remains of a wooden structure are located 30 feet north of the features.

Feature 1 is a concrete foundation pad measuring 17 feet north-south by 13 feet east-west.

Feature 2 is the remains of a concrete masonry unit wall. The feature is located 7 feet east of Feature 1. The feature is L-shaped and extends 25 feet north, at which point the alignment of the feature turns and extends 6 feet west.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1956 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as

undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to Carolyne W. Cooper in 1957 (BLM 2018).

### **HD-014**

This historic-period site is a historic-period farm/home site consisting of five features. Features consist of a dilapidated house structure (Feature 1), two concrete slabs (Feature 2 and Feature 5), a concrete masonry unit outbuilding (Feature 3), and a vertical metal pipe (Feature 4). A moderate to dense scatter of modern and historic-period refuse is present throughout the site.

Feature 1 a dilapidated house structure. The structure is a wood frame house with stucco walls. The structure has low pitch side gable roof with wide, overhanging eaves. The roof is covered with asphalt shingles. The house is built upon on a concrete slab foundation. Doorways are located on the north- and east-facing facades.

Feature 2 is a concrete pad that measures 4 feet north-south by 4 feet east-west. It appears to be the foundation for a privy, as a base and mounting bracket of a porcelain toilet are still attached to the pad.

Feature 3 is an outbuilding constructed of concrete masonry units. The building is located approximately 50 feet south of Feature 1. The building is built upon a concrete slab foundation. The concrete pad extends outward from the west-facing façade of the building. The pad in this area contains possible footings.

Feature 4 is a 9-inch-diameter vertical metal pipe embedded into the ground. The pipe is located approximately 25 feet west of Feature 3.

Feature 5 is a concrete slab measuring 25 feet north-south by 12 feet east-west. The slab is composed of approximately 20 individual concrete pads.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1968 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to John David Carroll in 1959 (BLM 2018).

### HD-015

This historic-period site is a farm/home site consisting of two features. Features consist of a dilapidated house structure (Feature 1), and a standing privy (Feature 2). A dense scatter of modern and historic-period refuse is present throughout the site.

Feature 1 a dilapidated house structure. The structure measures 25 feet east-west by 16 feet north-south. The structure is a wood frame house with stucco walls, and a flat roof with wide eaves. The structure rests on a slab foundation. Windows have been broken out, but a portion of wood window frame is still present

in the window space east of the entrance doorway on the south-facing façade. The structure has been vandalized.

Feature 2 is a standing privy structure, similar in construction to Feature 1. The structure measures 5 feet north-south by 5 feet east-west, and is located approximately 50 feet north of Feature 1. The privy is a wood frame structure with stucco walls, and a flat roof with overhanging eaves. The word LATRINE is stenciled on the south-facing façade, east of the doorway.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1968 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to Fontaine Storm in 1959 (BLM 2018).

#### HD-016

This historic-period site is a historic-period farm/home site consisting of four features. Features consist of a partially collapsed house structure (Feature 1), an embedded metal pipe (Feature 2), a concrete slab (Feature 3), and a privy pit (Feature 4). A light scatter of modern and historic-period refuse is present throughout the site.

Feature 1 a partially collapsed house structure. The structure measures 25 feet east-west by 21 feet north-south. The structure is a wood frame house with stucco walls, and a low pitch roof with wide eaves. The structure is built upon a slab foundation.

Feature 2 is a 9-inch-diameter vertical pipe encased in a concrete footing. This feature is located approximately 30 feet southwest of Feature 1.

Feature 3 is concrete slab measuring 12 feet north-south by 12 feet east-west. Several foundation anchor bolts are embedded along the perimeter of the slab. This feature is located 4 feet south of Feature 2.

Feature 4 is a wood-lined privy pit. The hole measures 3 feet 7 inches north-south by 2 feet 8 inches eastwest. The remains of a wood privy structure, including the seat board, is located approximately 60 feet east of the privy pit.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1968 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to Dora N. Thaxter and Ragnhild Olivia Chester in 1959 (BLM 2018).

### HD-017

This historic-period site is a historic-period farm/home site consisting of three features. Features consist of a concrete slab foundation (Feature 1), a concrete slab with a vertical metal pipe (Feature 2), and one rock alignment (Feature 3).

Feature 1 is a concrete slab foundation measuring 48 feet north-south by 23 feet east-west. There is a raised section of the foundation near the southwest corner. This section measures 21 feet north-south by 15 feet east-west, and it is bounded by concrete masonry units. This section is raised 6 inches above the remainder of the foundation.

Feature 2 is concrete pad with a vertical metal pipe located in the southeast corner. The pad measures 10 feet north-south by 9 feet 8 inches east-west.

Feature 3 is a rock alignment adjacent to the road, marking the entry point to the property. The alignment is approximately 50 feet long and formed into a v shape. It is composed of local rocks loosely assembled and embedded into the ground.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. A structure is first noted in this approximate location on the 1968 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. A structure is first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to Norman Cary Schilling in 1957 (BLM 2018).

### HD-018-I

This historic-period isolated find consists of one MSF can. The can was crushed, therefore accurate measurements of the artifact could not be taken. The can has stamped ends and an interlocking side seam. Soldering is globby and irregular around cap and vent hole. The artifact was found on the surface within a creosote-bush scrub environment.

# HD-019-I

This historic-period isolated find consists of one MSF can. The can was crushed, therefore accurate measurements of the artifact could not be taken. The can has stamped ends and an interlocking side seam. The artifact was found on the surface within a creosote-bush scrub environment.

#### HD-020

This historic-period site is a farm/home site consisting of two features. Features consist of a house structure (Feature 1), and a concrete foundation (Feature 2). There is a dense deposit of modern construction debris and refuse across the entire site.

Feature 1 a house structure with concrete masonry unit walls on a slab foundation. The roof has been removed. The structure measures 30 feet east-west by 18 feet north south. The remains of a wooden porch are attached to the east-facing façade.

Feature 2 is concrete foundation located approximately 120 feet east of Feature 1. The foundation measures 22 feet east-west by 20 feet north-south. A 2-inch-deep by 4-inch-wide notch around the foundation perimeter contains anchor bolts all around, with wood framing still present on the west and north perimeter.

A wood cross is located south of Feature 2. The cross is sturdy and well-made. In this area, chunks of concrete have been piled up to resemble graves, and wood stakes have been formed into crosses.

Archival research included a review of historic-period aerial photographs, maps, and property records held by the BLM. Structures are first noted in this approximate location on the 1968 Helendale, California 7.5-minute USGS topographic map (USGS 1956). In 1952 aerial photographs, the property is shown as undeveloped desert. Structures are first visible on the property in 1968 aerial photographs, the next year for which aerial photographs are available (NETROnline 2018). A search of BLM GLO Patents indicates that a five-acre plot of land containing this site was sold to Claire E. Robertson and Charles Milton Hackbusch in 1958 (BLM 2018). Due to the age of this home site, constructed sometime after 1958 and prior to 1968, it is unlikely that the cross present near Feature 2 represents a marker for a human burial. While it is not possible to ascertain with absolute certainty that remains are not present without either test excavation or use of ground penetrating radar, the likelihood of this representing a human burial is deemed low. It is most likely that the marker either indicates a pet burial or serves as a roadside memorial.

### HD-021-I

This historic-period isolated find consists of one MSF can and one bimetal beverage can. The MSF can measures 3 15/16 inches tall by 3 inches in diameter. The bimetal can is a pull tab beverage can. The can is crushed. The cans were found on the surface, in a southwest to northeast trending wash, sloping to the northeast.

#### HD-022-I

This historic-period isolated find consists of one green glass bottle. The bottle finish is missing. The base is embossed with Duraglas and an Owens-Illinois Glass Company maker's mark with a 1942 date code. The bottle was found on the surface, in a sandy drainage sloping to the east.

# HD-023

This site is a historic-period refuse deposit consisting of three MSF cans (A1 through A3). A1 is an MSF can measuring 3 15/16 inches tall by 3 inches in diameter. The can is knife punch opened. One end is embossed with CROWN BRAND. A2 is an MSF can measuring 4 14/16 inches tall by 3 9/16 inches diameter. The can has been knife opened. A3 is an MSF can measuring 4 6/16 inches tall by 2 15/16 inches diameter. The can contains heavy, globby solder on side seams and around the can ends.

#### HD-024-I

This historic-period isolated find consists of one colorless glass beverage bottle. The bottle base contains an Owens-Illinois Glass Company maker's mark with a 1966 date code. The body of the bottle is stippled,

and the shoulder is embossed with 12 FL OZ. / NO DEPOSIT NO RETURN. The artifact was found on the surface of a sandy slope west of the Mojave River.

# 4.5 Subsurface Testing Results

Subsurface testing was conducted at the two pre-contact sites (P36-003618 and P36-010952) to determine if pre-contact subsurface cultural material was present. Following are the results of the testing effort for these two sites.

## 4.5.1 P36-003618

Subsurface testing for this site occurred on May 21, 23, and 24, 2018. A total of 18 STPs were excavated across the site. 17 of these STPs were spaced apart at 40-meter intervals, with one arbitrarily placed STP (STP-02). All STPs were excavated to a depth of 20 centimeters. Four of the 18 STPs contained modern refuse at 0-5 cmbs, and one STP contained modern refuse at 0-10 cmbs. All STPs were negative for historic-period or pre-contact cultural material. Details of all 18 STPs are provided below in Table 5.

Table 5. P36-003618 STP Results				
STP Number	Level1: 0-20 cmbs	Level 2: 20-40 cmbs		
01	Negative	Negative		
02	Negative	Negative		
03	Negative	Negative		
04	Negative	Negative		
05	Negative	Negative		
06	Modern clear plastic at 0-5 cmbs	Negative		
07	Negative	Negative		
08	Modern bullet at 0-5 cmbs	Negative		
09	Negative	Negative		
10	Modern white and yellow plastic at 0-5cmbgs	Negative		
11	Modern auto glass, cloth, and aluminum foil at 0-10 cmbs	Negative		
12	Negative	Negative		
13	Modern .22 caliber rimfire brass casing at 0-5 cmbs	Negative		
14	Negative	Negative		
15	Negative	Negative		
16	Negative	Negative		

Table 5. P36-003618 STP Results				
STP Number	Level1: 0-20 cmbs	Level 2: 20-40 cmbs		
17	Negative	Negative		
18	Negative	Negative		

#### 4.5.2 P36-010952

Subsurface testing for this site occurred on May 21, 2018. Since the crew was unable to locate the surface deposit during the survey portion of the Project, the field crew conducted an additional survey within site boundaries. The crew covered the site walking east-west transects spaced five meters apart. The crew was unable to identify the surface deposit recorded in the original site record. A total of five STPs were excavated across the site. Due to the small size of the site, STPs were spaced at 20-meter intervals. STPs were excavated to a depth of 20 centimeters with the exception of one STP (STP-01) which was excavated to a depth of 60 centimeters to observe soil conditions below 40 cmbs. All STPs were negative for historic-period or pre-contact cultural material. The crew was unable to locate any site constituents on the surface or during subsurface testing, and the site is deemed to longer be extant at this location. Artifacts may have been removed from the area by erosional processes or looting. Details of all five STPs are provided below in Table 6.

Table 6. P36-010952 STP Results					
STP Number	Level1: 0-20 cmbs	Level 2: 20-40 cmbs	Level 3: 40-60 cmbs		
01	Negative	Negative	Negative		
02	Negative	Negative			
03	Negative	Negative			
04	Negative	Negative			
05	Negative	Negative			

# 5.0 EVALUATION OF ELIGIBILITY

# 5.1 Federal Evaluation Criteria

Under federal regulations implementing Section 106 of the NHPA (36 CFR 800), cultural resources identified in the Project Area of Potential Effects must be evaluated using NRHP and eligibility criteria. The eligibility criteria for the NRHP are as follows (36 CFR 60.4):

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess aspects of integrity of location, design, setting, materials, workmanship, feeling, association, and

- a) is associated with events that have made a significant contribution to the broad patterns of our history;
- b) is associated with the lives of a person or persons significance in our past;
- c) embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic value, or represents a significant and distinguishable entity whose components may lack individual distinction; or
- d) has yielded or may be likely to yield information important in prehistory or history.

In addition, the resource must be at least 50 years old, except in exceptional circumstances (36 CFR 60.4).

Historical buildings, structures, and objects are usually eligible under Criteria A, B, and C based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion D, the potential to yield information important in prehistory or history. The lead federal agency makes the determination of eligibility and seeks concurrence from the State Historic Preservation Officer.

Effects to NRHP-eligible resources (historic properties) are adverse if the project may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

# 5.2 State Evaluation Criteria

Under state law (CEQA) cultural resources are evaluated using CRHR eligibility criteria in order to determine whether any of the sites are Historical Resources, as defined by CEQA. CEQA requires that impacts to historical resources be identified and, if the impacts would be significant, that mitigation measures to reduce the impacts be applied.

A Historical Resource is a resource that:

- is listed in or has been determined eligible for listing in the CRHR by the State Historical Resources Commission;
- 2. is included in a local register of historical resources, as defined in PRC 5020.1(k);
- 3. has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g); or
- 4. is determined to be historically significant by the CEQA lead agency [CCR Title 14, § 15064.5(a)].

In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria.

For this Project, only the fourth definition of a historical resource is applicable because there are no resources previously determined eligible or listed on the CRHR, there are no resources included in a local

register of historical resources, and no resources identified as significant in a qualified historical resources survey.

The eligibility criteria for the CRHR are as follows [CCR Title 14, § 4852(b)]:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.;
- It is associated with the lives of persons important to local, California, or national history.
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, § 4852(c)].

Historical buildings, structures, and objects are usually eligible under Criteria 1, 2, and 3 based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion 4, the potential to yield information important in prehistory or history. An archaeological test program may be necessary to determine whether the site has the potential to yield data important to relevant research topics. Research topics relevant to sites within the Project APE are discussed in Section 5.3 below. The CEQA lead agency makes the determination of eligibility based on the results of the test program. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

Impacts to a historical resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, § 15064.5(a)].

# 5.3 Research Themes and Questions

### 5.3.1 Pre-Contact Resources Themes and Questions

A limited testing program was implemented to determine whether subsurface resources are present within two pre-contact sites located within the Project APE (CA-SBR-003618 and CA-SBR-010952), and, if so, to assess their potential to provide data with which to address the research questions below. If cultural material was found at CA-SBR-003618 and CA-SBR 010952 this would indicate a potential for the subsurface material at these two sites to yield additional information (in addition to that available from the surface artifacts) that could be used to address the following research questions.

Research themes and questions for pre-contact cultural resources have been organized to address data that might be found at the two subject sites. Pre-contact site types include base camps or villages, temporary camps, utilized rock shelters, milling stations, lithic scatters or lithic deposits, quarries or lithic sources, ceramic scatters, cemeteries, cremations, intaglios, miscellaneous rock alignments, petroglyphs,

pictographs, trails, roasting pits or hearths, pre-contact cairns, and non-human bone scatters (Earle et al. 1997:81,91-92). The two pre-contact sites in the Project APE represent only two of these site types: CA-SBR-003618 is a temporary campsite and CA-SBR-0109052 is a lithic scatter. Temporary campsites can contain flaked-stone tools, debitage, ground stone, FAR, and ceramics. Research questions that could be addressed by these materials relate to chronology, subsistence, technology, settlement organization, and ethnicity and/or cultural interactions. Each of these themes is discussed below with data needs provided.

# Chronology

Chronological controls are essential for any kind of integrative archaeological analysis. They are necessary not only to date artifacts, features, and site deposits, but also to trace regional trends in assemblage composition and pre-contact behavior. No matter how rich in artifacts or organic remains, deposits of unknown or uncertain temporal affinity will have limited interpretive value. Data needed to assess and refine chronological issues relate both to temporally indicative data and to the careful recording of spatio-temporally intact archaeological deposits and assemblages. Exploring discrete stratigraphic and feature contexts will be key to establishing chronological control; without good context, little can be done to independently assess the placement of artifact types, reduction strategies, or raw material use profiles. This research issue would be applicable to all site types. Research questions that could be addressed include:

- Does the site contain any temporally diagnostic artifacts? Projectile points, shell beads or ceramics?
- Is there evidence of natural or cultural disturbances that would indicate deposits are not in situ?
- What is the relationship between diagnostic artifacts for the site and regional cultural chronologies?
- Are there datable technological trends indicating temporal sensitivity of technological patterns?
- What is the lithology of the artifacts? Were certain lithological types used during certain time periods for the production of certain kinds of tools?
- Are there indications of occupational hiatuses in response to regional climatic variations?

# **Data Needs**

The evidence types needed to successfully address such research issues and questions include:

- temporally-diagnostic artifacts and
- geoarchaeological contextual information that can be used to compare cultural strata to known geological and environmental events.

#### Subsistence

Subsistence choices play a key role in determining other facets of hunter-gatherer behavior, which is sensitive to changes in population size, environmental conditions, and technological options. Pre-contact

subsistence is also a research domain that archaeologists can explore in fairly straightforward fashion with a host of direct and indirect data sources. Regional patterns from the southwestern Great Basin and Mojave Desert indicate significant shifts in subsistence strategies over the last 10,000-12,000 years. Data needed to assess subsistence patterns include direct dietary remains, markers of extractive technology (processing features, hunting and trapping weapons, and ground and battered stone used to process vegetal resources), and general data on settlement intensity within different habitat regimes. Most of these will be forthcoming, if present, from basic site investigation programs. As with most other archaeological issues, it will be crucial to acquire such subsistence data from well-dated, controlled contexts. This research issue could be applicable to all site types; however, it will be most useful with the category of Roasting Pits/Hearths. Research questions that could be addressed include the following:

- Are there changes in the relative dependency on specific floral and faunal resources visible in the dietary remains and technologies?
- Are these changes in response to changing environmental conditions, seasonality, mobility, and access to extractive technology?
- Is there evidence for the intensification of resource use as an adaptation to a more sedentary lifestyle?
- Is there an association between particular site types and limited subsistence pursuits? Is there evidence of cultivation?

## **Data Needs**

The evidence types needed to successfully address such research issues and questions include:

- temporally-diagnostic artifacts; and
- faunal and floral remains from hearths and food processing locals; and
- geoarchaeological contextual information that can be used to compare cultural strata to known geological and environmental events.

#### **Technology**

Technology serves as the interface between humans and nature, providing a means of extracting resources as well as manipulating the carrying capacity of environments. How technologies are organized speaks not only to the manner in which pre-contact populations manufactured and used artifacts, but provides important data regarding patterns of mobility and tool recycling. As with other research themes identified for this evaluation, regional trends show important changes in technology over the last 10,000-12,000 years. Both flaked and ground stone assemblages show a shift from more formalized, transported tools in the early- and mid-Holocene, to more expedient implements in late pre-contact times. Direct data needed to address such research issues will emerge from analysis of the tool assemblages collected from sites. Analytical methods must be structured to recover appropriate information on tool lithology, morphology, mode of production, functional characteristics, levels of modification and wear, and condition at time of discard. Debitage components will be just as important as tools in indicating whether

on- or off-site reduction occurred. Contextual data require careful assessment of distributions of lithic materials used to make tools in the area to secure inferences regarding point of material origin. Finally, as with other research questions, these studies will only be as good as their spatio-temporal controls allow, dependent on assemblages from discrete, well-dated archaeological deposits. This research issue would be applicable to all site types; however, it will be most useful with the category of Temporary Camps, Lithic Scatters, and Lithic Sources/Quarries. Research questions that could be addressed include the following:

- What is the relationship between pre-contact technologies and patterns of residential stability and/or mobility?
- Do assemblages show evidence of large-scale artifact reuse or expedient manufacture?
- Are artifacts manufactured from local or non-local lithic materials?
- What kinds of reduction strategies were being employed by pre-contact groups?
- Are there changes in the type or reduction strategies being used over time?
- Are the assemblages dominated by either bifaces or flake-based technologies that would indicate time investment?
- Is there evidence of changes in the relative role of percussion and pressure- retouch techniques over time?

# **Data Needs**

The evidence types needed to successfully address such research issues and questions include:

- temporally-diagnostic artifacts; and
- artifacts exhibiting diagnostic stages of manufacture and use; and
- evidence of adaptive reuse.

### Settlement Organization

Settlement studies serve as the natural complement to subsistence questions, dealing with how humans position themselves on the landscape to resolve intrinsic spatial and temporal imbalances in resource abundance and distribution. Settlement organization relates not only to the distribution of food resources, but to other valuable products, such as water and raw material, and to the dispersion of other populations with whom groups might be in cooperation or competition. Different activities occur in different areas by virtue of which resources are available there, what technologies are used to exploit them, and how labor is allocated to most effectively extract that energy. Apart from basic locational information regarding the geographic situation of archaeological sites relative to environmental characteristics and other cultural remains, studies of settlement organization depend on basic data of assemblage size and content (artifacts classified by function, organic remains, features, midden characteristics, etc.). More specific information on residential stability is generally obtained from seasonal assessments. As elsewhere, data derived from firm spatio-temporal contexts are far more informative than

those from questionable archaeological contexts. This research issue would be applicable to all site types; however, it will be most useful with the category of Temporary Camps. Research questions that could be addressed include the following:

- What are the functional characteristics of a particular site? What kinds of activities occurred at particular sites?
- Are there patterns in the characteristics of particular sites and their spatial distribution across the pre-contact landscape?
- What was the size of the population?
- Are there changes in structural complexity, settlement size, or intensity of occupation over time?
- What primary resources were exploited at a site? What changes in resource exploitation at a site are visible over time?
- Are there changes in the volume of resources consumed at a site and the range or technologies used to exploit resources? Do the changes correlate with environmental changes?
- Was the site in question occupied short-term, seasonally, or long-term? Are there any changes to this occupation over time? Is there indication that environmental constraints or changes in the landscape's resources were the cause of the population's movement?

#### **Data Needs**

The evidence types needed to successfully address such research issues and questions include:

- stratified deposits indicating long term and/or multiple use of a site; and
- features such as hearths containing floral and faunal remains; and
- tools and other artifacts classified functionally.

# **Ethnicity and Cultural Interactions**

Earle, et al. (1997) identify two closely related research domains. These are: (1) Cultural Affiliation and Exchange, and (2) Ethnicity. For the purposes of this work plan, these research domains are combined into one domain termed "Ethnicity and Cultural Interaction." This larger, more-encompassing research domain is understood as concerning the research areas listed below. This research issue would be applicable to all site types.

- Are there exotic materials present? What is the inferred valuation of imported materials?
- Does the number of certain materials change with time? Were the materials reused or recycled? What implications does this have on known patterns of trade?
- Are there culturally diagnostic artifacts?

- Are there indications of different human populations adapting differently to the environmental setting and pre-contact landscape? Are lithic sources utilized differently between time periods and human populations?
- Are there coeval and associated trade items found with exotic lithologies suggestive of concurrent trade practices? Do trade networks indicate territorial changes, variation in subsistence resource availability, or social organization? How are the materials prepared for trade?
- Can regional differences regarding technology or settlement and subsistence practices be identified?

## **Data Needs**

The evidence types needed to successfully address such research issues and questions include:

- temporally-diagnostic artifacts and other trade items; and
- lithic debitage from a variety of temporally constrained sites such that lithic reduction strategies and changing source areas can be determined.

# 5.3.2 Historic-Age Resources Themes and Questions

Historic-age resources may yield information relevant to the important research questions pertaining to Consumer Practices, Socio-Economic Status, Ethnicity, and Household Composition for the period before about 1920. By 1920 most households were fully integrated into the local and national economy and information about the period after about 1920 is available in the archival and historical record. Thus, the period of significance for settlement and economic development in the area ends in about 1920.Research questions for each topic are provided below.

#### **Consumer Practices**

What is the origin of packaged food, beverages, and toiletries? These items could have originated locally (Victor Valley), in California, nationally, or from other countries. Was there a change over time in the percentage of items from local, state, national, and foreign sources? Did people buy individual items from retail stores in Victorville or other nearby communities or did they buy items wholesale? The retail versus wholesale distinction may be reflected in package or container size.

# Socio-Economic Status

What was the socio-economic status of the resident users of the site? Higher socio-economic status may be indicated by the presence of luxury goods such as imported alcoholic beverages, porcelain dishes, silverware, and certain cuts of meat.

### **Ethnicity**

What was the ethnicity of the residents or users of the site? The presence of people from other countries could be indicated by the types of food and beverages consumed (as indicated by cans and bottles),

whether tobacco, snuff, or opium was used (pipes and tins), and types of leisure activities, such as games that were played.

# **Household Composition**

Were women and children present? The presence of women and children would be indicated by perfume and cosmetics containers, toys, and nursing bottles.

### **Evaluation**

Evaluations are based on CRHR and NRHP eligibility and integrity criteria described in Sections 5.1 and 5.2 Because of the similarity between the NRHP and CRHR eligibility criteria, the evaluation of each site by criterion is combined for both the NRHP and CRHR (i.e., Criterion A/1, B/2, C/3, and D/4).

For pre-contact sites, NRHP Criteria A and B and CRHR Criteria 1 and 2 do not apply because the sites are not associated with any significant historical events or important historical individuals. NRHP Criterion C and CRHR Criterion 3 do not apply because the sites do not contain standing structures or other built features with distinctive architectural characteristics or that represent the work of a master. Pre-contact sites are evaluated for NRHP eligibility under Criterion D and for CRHR eligibility under Criterion 4 for their potential to yield important information that contributes to our understanding of regional prehistory.

# 5.4 Previously Evaluated Resources

Of the 24 previously recorded resources located within the Project APE, 20 were previously evaluated for CRHR eligibility as part of a 2006 study (Estes et al. 2007). These consisted of 16 homesites and four refuse deposits. These sites are detailed below in Table 7. A discussion of the previous evaluations is provided after Table 7.

Table 7. Sites Within Project APE Previously Evaluated for the CRHR					
Site Number CA- SBR-	Primary Number P-36-	Recorder and Year	Age/ Period	Site Description	CRHR Eligible?
N/A	021262	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit	No
N/A	021263	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit	No
N/A	021264	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No
N/A	021265	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No
N/A	021266	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No
N/A	021267	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No

Table 7. Sites Within Project APE Previously Evaluated for the CRHR					
Primary Number P-36-	Recorder and Year	Age/ Period	Site Description	CRHR Eligible?	
021268	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021269	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021270	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021272	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021273	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021274	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021275	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021276	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021277	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021278	Allen Estes and Thomas Young (2006); Allen Estes (2007)	Historic	Refuse deposit, remains of wood framed house and privy	No	
021280	Allen Estes and Thomas Young (2006); Allen Estes (2007)	Historic	Refuse deposit, and remains of a wood framed house, shed, and privy	No	
021281	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit and structure foundation	No	
021282	Allen Estes and Thomas Young (2006)	Historic	Refuse deposit	No	
	Primary Number P-36-  021268  021269  021270  021272  021273  021274  021275  021276  021277  021278  021280  021281	Primary Number P-36-Recorder and Year021268Allen Estes and Thomas Young (2006)021269Allen Estes and Thomas Young (2006)021270Allen Estes and Thomas Young (2006)021272Allen Estes and Thomas Young (2006)021273Allen Estes and Thomas Young (2006)021274Allen Estes and Thomas Young (2006)021275Allen Estes and Thomas Young (2006)021276Allen Estes and Thomas Young (2006)021277Allen Estes and Thomas Young (2006); Allen Estes (2007)021280Allen Estes and Thomas Young (2006); Allen Estes (2007)021281Allen Estes and Thomas Young 	Primary Number P-36-Recorder and YearAge/ Period021268Allen Estes and Thomas Young (2006)Historic021269Allen Estes and Thomas Young (2006)Historic021270Allen Estes and Thomas Young (2006)Historic021272Allen Estes and Thomas Young (2006)Historic021273Allen Estes and Thomas Young (2006)Historic021274Allen Estes and Thomas Young (2006)Historic021275Allen Estes and Thomas Young (2006)Historic021276Allen Estes and Thomas Young (2006)Historic021277Allen Estes and Thomas Young (2006); Allen Estes (2007)Historic021278Allen Estes and Thomas Young (2006); Allen Estes (2007)Historic021280Allen Estes and Thomas Young (2006); Allen Estes (2007)Historic021281Allen Estes and Thomas Young (2006)Historic021282Allen Estes and Thomas Young (2006)Historic	Primary Number P-36-         Recorder and Year         Age/ Period         Site Description           021268         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021269         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021270         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021272         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021273         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021274         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021275         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021276         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021277         Allen Estes and Thomas Young (2006)         Historic         Refuse deposit and structure foundation           021278         Allen Estes and Thomas Young (2006); Allen Estes (2007)         Historic         Refuse deposit, remains of wood framed house, shed, and privy           021280         Allen Estes	

Four historic-period refuse deposit sites (see Table 7) were evaluated for CRHR eligibility in 2006 by WSA . The source of these deposits could not be identified and they could not be clearly associated with any residential properties within the area. The sites were found to lack integrity of location and materials, WSA found that the sites do not have the potential for buried features or deposits that would cause them to be considered significant resources. As these sites cannot be associated with persons or events of historic importance, and as the sites do not contain features and characteristics that represent the work of a master, and as the sites do not possess the potential to yield information important to our understanding

Historic

Refuse deposit

No

Allen Estes and David Buckley

(2007)

N/A

021293

of local or regional history, WSA evaluated the sites as not eligible for listing in the CRHR under any criteria (Estes et al. 2007). ECORP has reviewed these evaluations and concurs with this recommendation.

Sixteen historic-period homesites (see Table 7) were evaluated for CRHR eligibility in 2006 by WSA. WSA found that these sites do not have the potential for buried features or deposits that could cause them to be considered significant. The original structures on these sites have either collapsed or been removed; therefore, the sites lack structural integrity, as well as integrity of location and materials. Artifacts present within these sites date to the mid to late twentieth century and cannot be more precisely dated. The properties cannot be associated with persons or events important to local or regional history. As these sites cannot be associated with persons or events of historic importance, and as the sites do not contain features and characteristics that represent the work of a master, and as the sites do not possess the potential to yield information important to our understanding of local or regional history, WSA evaluated the sites as not eligible for listing in the CRHR under any criteria (Estes et al. 2007). ECORP has reviewed these evaluations and concurs with this recommendation.

## 5.4.1 NRHP Evaluations

As part of the current study, all 20 resources previously evaluated for the CRHR were evaluated using NRHP evaluation criteria. These sites consist of four historic-age refuse deposits, and 16 historic-age homesites.

## **Historic-Age Refuse Deposits**

P36-021262, P36-021263, P36-021282, and P36-021293 are all historic-period refuse deposits. The sites consist primarily of domestic refuse, consisting mainly of cans and glass fragments. The historic refuse deposits appear to represent isolated dumping events. They cannot be tied to specific residences and it is unclear whether or not the sites have any ties to the residents of the area or are the result of roadside dumping along the multiple roads through the area. These sites are ubiquitous in nature and cannot be associated with any significant event in local or regional history and do not contribute to any broad pattern of local history. Therefore, these sites are not eligible for the NRHP under Criterion A.

There is no evidence that the sites were part of a residence or had any strong associations with historical persons in the region. Due to the very nature of the creation of these sites through informal dumping events, it is impossible to associate the artifacts with specific individuals. Thus, these sites are not eligible for the NRHP under Criterion B.

The sites consist of common domestic refuse, and as such do not display any unique characteristics, represent the work of a master, or display any innovative technologies. As a result, they are not eligible for the NRHP under Criterion C.

The sites consist of surface deposits of ordinary refuse that cannot be associated with any known persons or households. Therefore, they lack historical context and do not have the potential to yield data with which to address research questions regarding early settlement or use of the area. The sites cannot yield information important in history. Therefore, they are evaluated as not eligible for the NRHP under Criterion D.

Sites P36-021262, P36-021263, P36-021282, and P36-021293 do not meet any of the NRHP eligibility criteria and are not Historic Properties as defined by the NRHP.

## **Historic-Age Home Sites**

Sixteen historic-age home sites were previously recorded and evaluated for the CRHR. As part of the current study, sites P36-021264, P36-021265, P36-021266, P36-021267, P36-021268, P36-021269, P36-021270, P36-021272, P36-021273, P36-021274, P36-021275, P36-021276, P36-021277, P36-021278, P36-021280, and P36-021281 have all been evaluated for NRHP eligibility. Of the 16 home sites, two contain a collapsed structure (P36-021278 and P36-021280), and 14 home sites contain foundations with structures completely removed (P36-021264, P36-021265, P36-021266, P36-021267, P36-021268, P36-021269, P36-021270, P36-021272, P36-021273, P36-021274, P36-021275, P36-021276, P36-021277, and P36-021281). Archival research of historic aerial photographs, maps, and property records show that all 16 home sites were constructed from the mid-1950s to the late 1960s. Due to the similarity of these sites in regard to site constituents, condition, and year of construction, this NRHP evaluation discussion will cover all 16 historic-age home sites.

The buildings, features, and the properties date to the mid-1950s to the late-1960s, and are not associated with any important historical event or series of events. An influx of residents in the 1950s and 1960s who came to live in the Victorville and Adelanto area was not a significant event in the history of the area; further, these are 16 of many properties in the area developed in the 1950s and 1960s and there is no indication they are associated with significant historical events in our past. Therefore, they do not meet eligibility criteria under NRHP Criterion A.

Similarly, the sites cannot be said to be associated with a person or group of people important in history. Archival research did not indicate that any of these home sites were associated with people important to local or regional history. Therefore, these sites do not meet eligibility criteria under NRHP Criterion B.

For sites with structural remains (P36-021278 and P36-021280), the structures are collapsed and fragmented and do not contain visible elements of a particular architectural style. None of the building remains represent the work of a master or possess any high artistic value. The remaining features of the sites are common in construction and design, and the sites as a whole do not represent a significant distinguishable entity. Therefore, these sites do not meet eligibility criteria under NRHP Criterion C.

The data potential in these sites lies in the historic record; all the sites constituents are either dilapidated or have been removed. Associated refuse deposits are generally sparse, with diagnostic artifacts dating to the mid-twentieth century. Artifacts generally consist of the fragmentary remains of post-World War II domestic refuse and building materials. The archival record lists all land and property transactions during the period to which the sites pertain (mid-1950s through 1960s). These sites do not have the potential to yield additional important information in prehistory or history beyond what is already contained in the historic record and are, therefore, not eligible under NRHP Criterion D.

Sites P36-021264, P36-021265, P36-021266, P36-021267, P36-021268, P36-021269, P36-021270, P36-021272, P36-021273, P36-021274, P36-021275, P36-021276, P36-021277, P36-021278, P36-021280, and

P36-021281 are recommended as not eligible for listing in the NRHP under any criteria, and are not Historic Properties as defined by the NRHP.

# 5.5 Newly Evaluated Resources

### 5.5.1 Isolated Finds

P36-026891, HD-001-I, HD-003-I, HD-009-I, HD-018-I, HD-019-I, HD-021-I, HD-022-I, and HD-024-I are isolated finds. Isolates are artifacts that are not associated with other artifacts or features and are not connected with the human activity that produced them. Isolates do not individually contribute to the broad patterns of history because they cannot be connected to a particular historical event (Criterion A/1). Isolates are similarly difficult to associate with specific individuals due to their lack of association with archaeological or historical sites, and generally no information exists in the archival record to associate isolates with important individuals in history (Criterion B/2). Isolates do not embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values (Criterion C/3). Finally, isolates, which consist of only one or two artifacts, cannot provide sufficient data to contribute important information in history or prehistory (Criterion D/4). Therefore, these isolated finds do not meet the eligibility criteria for inclusion in the NRHP or the CRHR and are not considered Historic Properties as defined by the NHPA or Historical Resources as defined by CEQA.

# 5.5.2 Pre-Contact Artifact Deposits

CA-SBR-003618 and CA-SBR-010952 are two small pre-contact artifact scatters. CA-SBR-3618 was a small artifact scatter containing four jasper and chalcedony flakes and an unknown amount of FAR. During the 2017 ECORP survey, only one artifact, a jasper flake, could be found. CA-SBR-010952 was a small lithic deposit containing 14 quartzite, chalcedony, and jasper flakes. The site was not located during the 2017 ECORP survey and no artifacts were found in its recorded location. No subsurface deposits were found during test excavations at either site. As such, neither site can provide sufficient data with which to address the pre-contact period research questions in Section 5.3.1. CA-SBR-003618 and CA-SBR-010952 are not eligible for the NRHP under Criterion D or for the CRHR under Criterion 4. They are not eligible for the NRHP or CRHR under any criteria.

### 5.5.3 Historic-Age Refuse Deposits

P36-010951 and HD-023 are historic-period refuse deposits. The sites consist primarily of domestic refuse, consisting mainly of cans and glass fragments. The historic refuse deposits within the Project APE appear to represent isolated dumping events. They cannot be tied to specific home sites and it is unclear whether or not the sites have any ties to the residents of the area or are the result of roadside dumping along the multiple roads through the area. These sites are ubiquitous in nature and cannot be associated with any significant event in local or regional history and do not contribute to any broad pattern of local history. Therefore, these sites are not eligible for the NRHP or CRHR under Criterion A/1.

There is no evidence that the sites were part of a residence or had any strong associations with historical persons in the region. Due to the very nature of the creation of these sites through informal dumping

events, it is impossible to associate the artifacts with specific individuals. Thus, these sites are not eligible for the NRHP or CRHR under Criterion B/2.

The sites consist of common domestic refuse, and as such do not display any unique characteristics, represent the work of a master, or display any innovative technologies. As a result, they are not eligible for the NRHP or CRHR under Criterion C/3.

The sites consist of surface deposits of ordinary refuse that cannot be associated with any known persons or households. Therefore, the refuse deposits lack historical context and do not have the potential to yield data with which to address research questions regarding early settlement or use of the area. The sites do not have the potential to yield information important in history. Therefore, they are evaluated as not eligible for the NRHP or CRHR under Criterion D/4.

Sites P36-010951 and HD-023 do not meet any of the NRHP or CRHR eligibility criteria and are not Historic Properties as defined by the NRHP or Historical Resources as defined by CEQA.

# 5.5.4 Historic-Age Home Sites

Twelve historic-age home sites (HD-002, HD-006, HD-007, HD-008, HD-010, HD-011, HD-012, HD-014, HD-015, HD-016, HD-017, and HD-020) were recorded and evaluated as part of the current study. Of the twelve home sites, one contains a collapsed structure (HD-002), seven contain partially collapsed structures (HD-006, HD-010, HD-011, HD-014, HD-015, HD-016, and HD-020), and four home sites contain foundations with structures completely removed (HD-007, HD-008, HD-012, and HD-017). Archival research using historic aerial photographs, maps, and property records show that all 12 home sites were constructed from the mid-1950s to the late 1960s. Due to the similarity of these sites in regard to site constituents, condition, and year of construction, this evaluation discussion will cover all 12 historic-age home sites.

The buildings, features, and the properties date to the mid-1950s to the late-1960s, and are not associated with any important historical event or series of events. An influx of residents in the 1950s and 1960s who came to live in the Victorville and Adelanto area was not a significant event in the history of the area; further, these are 12 of many properties in the area developed in the 1950s and 1960s and there is no indication they are associated with significant historical events in our past. Therefore, they do not meet eligibility criteria under NRHP Criterion A or CRHR Criterion 1.

Similarly, the sites cannot be said to be associated with a person or group of people important in history. A search of property records has revealed the names of 15 individuals associated with 11 of the 12 home sites. Archival research did not indicate these people were important in history. For the one site for which an owner could not be identified (HD-007), archival research did not indicate that this property is associated with any individual important in local or regional history. Therefore, these sites do not meet eligibility criteria under NRHP Criterion B or CRHR Criterion 2.

For sites with partially standing buildings (HD-006, HD-010, HD-011, HD-014, HD-015, HD-016, and HD-020), the buildings possess some elements associated with the Contemporary style of mid-century architecture, such as low-pitched roofs with overhanging eaves and asymmetrical facades, but they are not high-style examples of that style. None of the buildings represent the work of a master or possess

any high artistic value. The remaining features of the sites are common in construction and design, and the sites as a whole do not represent a significant distinguishable entity. Therefore, these sites do not meet eligibility criteria under NRHP Criterion C and CRHR Criterion 3.

The data potential in these sites lies in the historic record. All the sites constituents are either dilapidated or have been removed. Diagnostic artifacts within associated refuse deposits date to the mid to late twentieth century, after the period of significance for settlement and economic development in the area which ends circa 1920. Artifacts generally consist of the fragmentary remains of domestic refuse and building materials. The archival record lists all land and property transactions for the period to which the sites date (mid-1950s through 1960s). Sites HD-006, HD-010, HD-011, HD-014, HD-015, HD-016, and HD-020 do not have the potential to yield additional important information in prehistory or history and are, therefore, not eligible under NRHP Criterion D and CRHR Criterion 4.

Lastly, these sites are composed of features that have either been removed or exist in an extremely dilapidated state. The removal of structures and/or the severely degraded state of extant buildings has compromised the integrity of design, workmanship, feeling and association of these sites.

Sites HD-006, HD-010, HD-011, HD-014, HD-015, HD-016, and HD-020 are evaluated as not eligible for listing in the NRHP or CRHR under any criteria and lack sufficient integrity. They are not Historic Properties as defined by the NRHP or Historical Resources as defined by CEQA.

# 6.0 SUMMARY AND RECOMMENDATIONS

A cultural resources investigation was conducted for an approximately 699-acre Project APE in the City of Victorville, San Bernardino County, California. As a result of the field survey, 24 previously recorded resources were updated, and 13 newly recorded sites and eight newly recorded isolated finds were documented. Of the 24 previously recorded resources, 20 were previously evaluated in 2006 using CRHR eligibility criteria, and were evaluated as not eligible for listing in the CRHR under any criteria. ECORP has reviewed and concurs with the recommendation of the previous evaluations. ECORP evaluated these 20 resources for the NRHP and recommended them not eligible for the NRHP. In addition to the previously recorded and evaluated resources, 13 newly recorded sites, two previously recorded sites, eight newly recorded isolated finds and one previously recorded isolated find were evaluated using NRHP and CRHR eligibility criteria and are evaluated as not eligible for listing in the NRHP or CRHR under any criteria.

As part of the current study, two previously recorded pre-contact sites (P36-003618 and P36-010952) were tested to determine the presence or absence of subsurface cultural material. As a result of this testing effort, both sites were found to be negative for subsurface pre-contact cultural material and only a few artifacts were present on the surface. These sites do not have the potential to yield data with which to address research questions regarding pre-contact settlement or use of the area. The sites do not have the potential to yield information important about the pre-contact period. Therefore, they are evaluated as not eligible for the NRHP or CRHR under Criterion D/4 and are not eligible for NRHP and CRHR under any criteria.

Because no Historic Properties as defined by Section 106 regulations and no Historical Resources as defined by CEQA were identified in the Project APE, the proposed Project would not result in adverse effects to known Historic Properties or significant impacts to Historical Resources.

Geologic maps of the area show that the Project APE contains Pleistocene and Holocene quaternary alluvium. An area of Pleistocene older quaternary alluvial sediments is located on a terrace west of the Mojave River. This terrace underlies the eastern two-thirds of the Project APE and the majority of the Gen Tie. The deposition of these Pleistocene sediments likely predates human occupation of the area. However, of the 31 previously recorded resources containing pre-contact cultural constituents within a one-mile radius of the Project APE, 21 are located on this alluvial terrace. This indicates that the Pleistocene terrace likely represents an occupational surface that was heavily utilized by pre-contact occupants of the area. It is unclear from a review of previously recorded site records and reports whether or not subsurface archaeological resources have been identified within these Pleistocene sediments. However, due to the concentration of known archaeological resources on the Pleistocene terrace, the potential for subsurface cultural deposits within this area is considered high. The western portion of the APE overlies more recent Holocene alluvial deposits. Although few pre-contact sites have been identified within the Holocene sediments, these sediments may be overlying portions of the Pleistocene terrace and there is a strong possibility that a buried occupation surface underlies the Holocene deposits within the APE. Thus, although no subsurface evidence of archaeological deposits was identified during testing of the two pre-contact sites within the APE, the potential for the Project APE to contain subsurface resources is considered high.

Near site HD-020, a cross is present. Due to the age of this home site, constructed sometime after 1958 and prior to 1968, it is unlikely that the cross present near Feature 2 represents a marker for a human burial. It is not possible to ascertain with absolute certainty that remains are not present without either test excavation or use of ground penetrating radar; however, the likelihood of this representing a human burial is deemed low. To mitigate for the possibility that human remains are present at this location, it is recommended that all ground disturbing activity at the location of the cross feature be monitored by a qualified archaeologist. If human remains are discovered, the protocol for the discovery of human remains detailed below shall be followed.

Both CEQA and Section 106 of the NHPA require the Lead Agency to address any unanticipated cultural resource discoveries during project construction. Therefore, ECORP recommends the following mitigation measures be adopted and implemented by the Lead Agency to reduce potential adverse impacts to Less than Significant. To satisfy the requirements of Section 106, post-review discoveries would be handled in accord with the provisions of 36 CFR 800.13.

A qualified archaeologist shall monitor all ground disturbing activities within native sediments. If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 100-foot radius of the discovery. The archaeologist shall evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist concludes that the find does not represent a cultural resource, then work may resume immediately and no agency notifications are required.
- If the professional archaeologist concludes that the find does represent a cultural resource from any time period or cultural affiliation, then he or she shall immediately notify the City of Victorville and applicable landowner. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work cannot resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.
- If the find includes human remains, or remains that are potentially human, then he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, then the Coroner will notify the Native American Heritage Commission, which then will designate a Native American Most Likely Descendant (MLD) for the project (Section 5097.98 of the Public Resources Code). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, then the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work cannot resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

The Lead Agency is responsible for ensuring compliance with these mitigation measures because damage to significant cultural resources is in violation of CEQA and Section 106. Section 15097 of Title 14, Chapter 3, Article 7 of CEQA, *Mitigation Monitoring or Reporting*, "the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program."

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December 2018

2017-062.003

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High Desert Solar Project

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## LIST OF ATTACHMENTS

Attachment A - Sacred Lands File Coordination

Attachment B - Project Area Photographs

Attachment C - **Confidential** Cultural Resource DPR 523 Site Records **(Redacted)** 

Attachment D – **Confidential** Site Locations (**Redacted**)

# ATTACHMENT A

Sacred Lands File Coordination

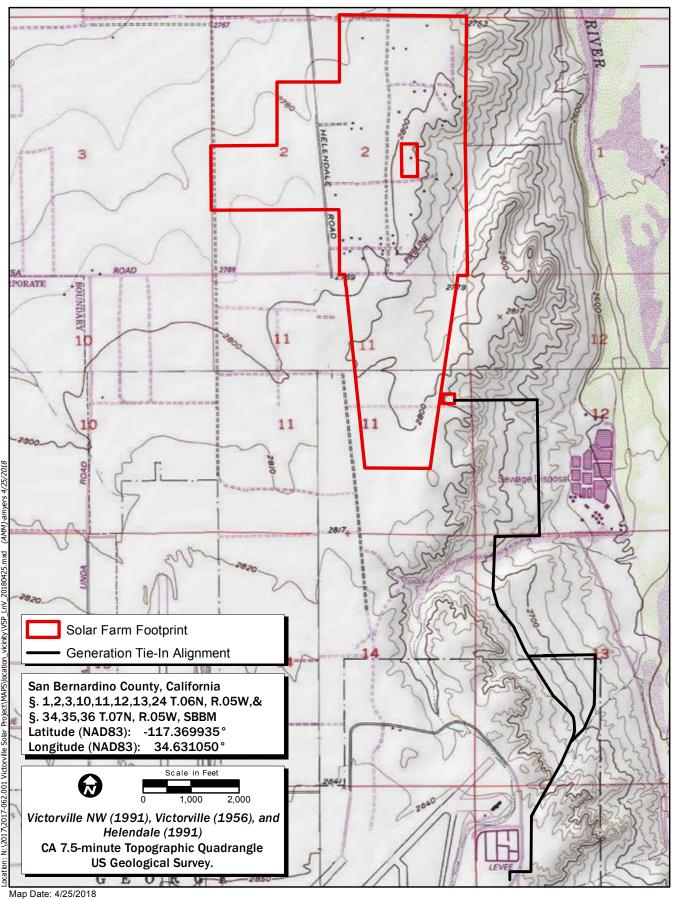
## **Sacred Lands File & Native American Contacts List Request**

### **Native American Heritage Commission**

1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691 916-373-3710 916-373-5471 – Fax nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: High Desert Solar Project	oject (Victorville Solar P	roject)
County: San Bernardino		
USGS Quadrangle Name: Victo	orville NW (1991), Victorville	e (1956), and Helendale (1991)
Township: 6N and 7N Range:	5W Section(s):	1, 2, 3, 10, 11, 12, 13, 24 in T6N and 34, 35, 36 in T7N
Company/Firm/Agency:_ECOF	RP Consulting, Inc.	
Street Address: 215 N. Fifth Stre	et	
City:_Redlands, CA		<b>Zip:</b> 92374
Phone: (909) 307-0046		
Fax: (909) 307-0056		
Email: wblumel@ecorpconsulting	j.com	
photovoltai constructed	ic (PV) energy facility in the d on approximatley 700 acre ction line installed to the so	o construct a 100 megawatt (MW) solar City of Victorville. The project would be es of land with an approximately 3-mile lon uth, terminiating at the existing High Deser



#### NATIVE AMERICAN HERITAGE COMMISSION

Cultural and Environmental Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 (916) 373-3710



April 27, 2018

Wendy Blumel ECORP Consulting, Inc.

Sent by E-mail: wblumel@ecorpconsulting.com

RE: Proposed High Desert Solar (Victorville Solar) Project, City of Victorville; Victorville, Victorville NW, and Helendale USGS Quadrangles, San Bernardino County, California

Dear Ms. Blumel:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the area of potential project effect (APE) referenced above with <u>negative</u> results. Please note that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayls Totton
Gayle Totton, M.A., PhD.

Associate Governmental Program Analyst

(916) 373-3714

**CONFIDENTIALITY NOTICE:** This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, please contact the sender and destroy all copies of the communication.

#### Native American Heritage Commission Native American Contact List San Bernardino County 4/27/2018

#### Morongo Band of Mission Indians

Robert Martin, Chairperson 12700 Pumarra Rroad Banning, CA, 92220

Phone: (951) 849 - 8807 Fax: (951) 922-8146 dtorres@morongo-nsn.gov

#### Morongo Band of Mission Indians

Denisa Torres, Cultural Resources Manager

12700 Pumarra Rroad Cahuilla Banning, CA, 92220 Serrano

Phone: (951) 849 - 8807 Fax: (951) 922-8146 dtorres@morongo-nsn.gov

#### San Fernando Band of Mission Indians

Donna Yocum, Chairperson P.O. Box 221838

Newhall, CA, 91322 Serrano Phone: (503) 539 - 0933 Tataviam Fax: (503) 574-3308

Fax: (503) 574-3308 ddyocum@comcast.net

#### San Manuel Band of Mission Indians

Lee Clauss, Director of Cultural Resources

26569 Community Center Drive Serrano

Highland, CA, 92346 Phone: (909) 864 - 8933 Fax: (909) 864-3370

Iclauss@sanmanuel-nsn.gov

#### Serrano Nation of Mission Indians

Goldie Walker, Chairperson P.O. Box 343

Patton, CA, 92369 Phone: (909) 528 - 9027 Serrano

Cahuilla

Serrano

Kitanemuk

#### Twenty-Nine Palms Band of Mission Indians

Darrell Mike, Chairperson 46-200 Harrison Place Coachella, CA, 92236 Phone: (760) 863 - 2444

Fax: (760) 863-2449 29chairman@29palmsbominsn.gov

## Twenty-Nine Palms Band of Mission Indians

Anthony Madrigal, Tribal Historic

Preservation Officer 46-200 Harrison Place

Coachella, CA, 92236 Phone: (760) 775 - 3259 Chemehuevi

Chemehuevi

amadrigal@29palmsbomi-nsn.gov

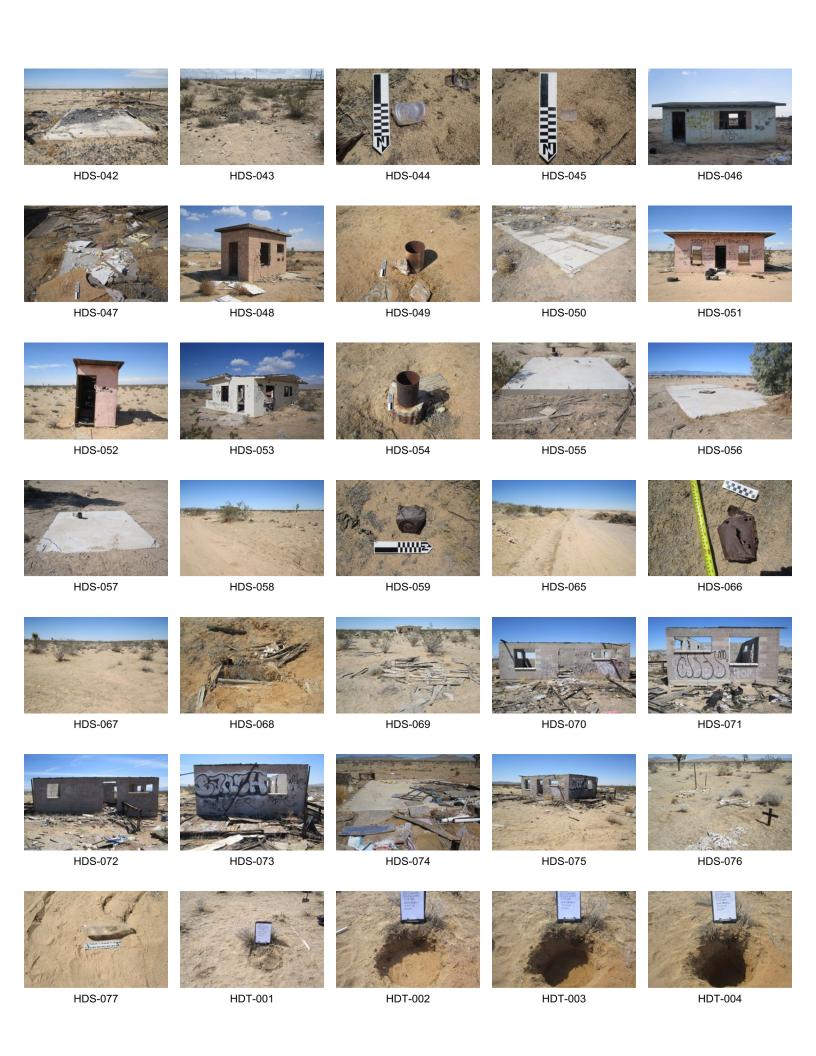
This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resource Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed High Desert Solar (Victorville Solar) Project, San Bernardino County.

## ATTACHMENT B

Project Area Photographs









































































































































































































































































































































ECORP	Consulting, Inc.	Photo Log			o Ž
SITE: Camera	Disas Number				
	Photo Number	Description	Facing	Date	Initials
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(12-2	3 (116-0886)	HD-002: overview of collapsed structure	NE	4/17/18	210
612-2	4 (11600887)	HD-002: foundation close-up	NNE	4/17/18	510
C12-3	2 (110-0888)	HD-002: collapsed wall close-up	NNE	4/17/18	<b>&gt;10</b>
- 012-2	6 (176-0889)	HD-002: wood reinforced privy	N	4/17/18	570
C12-2	7 (46-0890)	HO-003-I: MSF can	N	4/17/18	210
7	8 (116-0891)	HD-004: Feature 1, collapsed Structure	SW	4/17/18	210
C12-2	J (M-0863)	HD-004: Featurel, formation close-up	W	4/17/18	5T0
C12-2	10 (11/2-0843)	779-004- Feature 1, structure	NE	4/17/18	210
C12-2	modern	HD-004- Fature 2 well			
C12-2		HD-824 - Feature Solkray & platform		1	
C13- 3		HD-004 reature 4 footing			
C15-5		HD-004 - Feature 5 footing			•
C15-3		HD-004- Feature 6, tooling			
C+3-1	$\overline{V}$	HD-004. Feature 7 platform			
C12-2	11 (116-08-94)	P36-003618: 3050er Flake	W	4/17/18	<u>&gt;10</u>
612-2	12 (116-0895)	11D-004-T.	5	4/17/18	<del>570</del>
-(12-7	13 (11-0896)	HD 005: everien 3 MSF	SE	4/17/18	270
612-7	14 (W-0877)	HD-005: A) can		4/17/18	\text{\sqrt{0}}

Feature

Feature-

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SITE:				<del></del>	
Camera	Photo Number	Description	Facing	Date	Initials
C13-3	12 (116-0848)	HD-006 Feature 1: overview of structure	SW	4/18/18	<b>510</b>
C15-3	16 (116:0899)	HD-006 Feature 1: pad close-up	3	4/18/18	270
C13-3	17 (115-0900)	HD-006, Featurel: north facade	S	4/18/18	210
C13-J	18 (116-0401)	HD-006 Feature 1: east facable	W	4/18/18	510
C15-3	19 (16-0902)	HD-006 Feature 1: South Facade	Ŋ	4/18/18	210
C15-5	DB (116-0903)	HD-006, Featureli west facade	E	4/18/18	210
C12-2	21 (16-0904)	HD-006 Feature 2: concrete pad	NW	4/18/18	510
(12-2	35 (116-0402)	example of construction dumping	NE	4/18/18	210
C13-3	23 (116-0906)	HD-007; overview of foundation	NNW	4/18/18	210
<u> </u>	24 (116-0907)	the state of the s	E	4/18/18	5T0
C12-2	25 (116-1908)	HD-008, Feature 2: animal pen	NE	4/18/18	510
(12-2	26 (11610909)	HD-008, Feature 3: concrete foundation	WSW	4/18/18	210
C13- J	27 (116-0910)		NE	4/18/18	210
C13-3	78 (116-0911)	platition	$\vee$	4/18/18	210
C12-3	29 (116-0912)		W	4/18/18	510
C12-7	30 (116-0913)	P36-021281: well (Feature 2)	N	4/19/18	570
C13-J	31 (116-0914)	in the state of th	E	4/19/18	570
C12-2	32 (116-0915)		W	4/19/18	5T0
C12-2	33 (116-0416)	HD-010 Feature 2: concrete platform	SE	4/19/18	570
C12-2	34 (118-917)	HD-010 Feature 3: concrete pad	5	4/19/18	210

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SITE:	,		Ī		·
Camera	Photo Number	Description	Facing	Date	Initials
C12-2	35 (116-0918)	HD-010 Feature H: concrete pad (well?)	5	4/19/18	
C13-3	36 (116-0919)	HD-010, Feature S: broken concrete and	5	4/19/18	2.10
C12-2	37 (118-09.20)	HD-010 Feature 6: pipe	5	4/19/18	510
C13-3	38 (116-0921)	HD-010, Feature 7: pit	S	4/19/18	510
C13-5	39 (116-0922)		NE	4/19/18	510
C12-2	40 (16-0923		NNE	4/19/18	<del>5</del> T0
(12-7	41 (16-0924)	HD-011, Feature 3: pit	N	4/19/18	570
C12-2	42 (116-0925)	HD-012: concrete platform w/ burned debris		4/19/18	210
C12-2	43 (116-0926)	HD-013: refuse deposit	S	4/19/18	210
C12-5	44 (116-0927	HD-013: SCA glass jug base	5	4/19/18	210
C/3-3	45 (116-0928	) HD-013: SCA glass bottle fragment (embossing	2 2	419/13	210
0(2-2	Hb (116-0929)	HD-014, Feature 1: main structure	2	4/19/18	500
C12-2	47 (16-0930)	HD-014, Feature 2: privy platform	N	4/19/18	570
C12-2	48 (116-0931)	HD-014 Feature 3: secondary structure	SE	4/19/18	570
C13-J	49 (116-0932)	HD-014, Feature 4: vell	N	4/19/18	210
(12-2	50 (116-0933)	HD-014 Feature S: concrete block corport	NE	4/19/18	510
C12-2	51 (116-0934)	HD-015 Feature 1! main structure	N	4/19/18	370
C12-2	52 (116-0935)	DACA	N	4/19/18	<b>&gt;</b> 70
C12-2	53 (145-0936)	HD-016, Feature 1: main structure	NE	4/19/18	210
C12-2	54 (116-0937)	HD-016, Feature 2: well	Ν	4/19/18	210

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SITE:		1 Hoto Log	1		
Camera	Photo Number	Description	Facing	Date	1-141-1
C12-2	55 (16-0938)	HD-016 Feature 3: concrete platform	N	4/19/18	Initials
C12-2	56 (116-0939)	HD-017 Feature 1: multi-level concrete platform	5W		
C12-2	57 (116-0940)	HD-017, Feature 2: vell & play form	5 6	4/20/18	5T0
C12-2	58(116-0941	HD-010 F - 2 2 1 0 1		420/18	510
(12-2	59 (116-0942)	HD-010, Feature 8: stone alignment	NW	1/20/18	240
612 2	Fa ( a ( 11 - 9(12)		· W	4/20/18	210
	0 0 0 1 1 1 1	1110 100		11/20/18	5.7 600
42-1	61 (1/2 1914)	MACKERNE		4/20/10	SAW
<del>C122</del>	62 (16 -945)	MARKOTAG		6/20/10	sn.
C12 2	(2) CHO 0916)	MARICHUC		11/0 / 10	1-044
CIROZ	Culle one?	MAR-KRYAL		7120118	SAW
C-12-2	65	Gentie corridor near sewage ponds	NW	112210	· n
(100	66	HP-019-I: MSF can	,	4-23-18	
C-12-2	67		Ground	4-23-18	1
C-12-2	68	Project Overview	//	4-23-18	TO
	,	HD-016: Feature 4	Ground	4-23-18	The
C-12-1	69	HD-016: Feature 4 debris	$\mathcal{N}_{\mathcal{I}}$	4-23 18	7
C-12-2	70	HD-020: South elevation	N	4-23-18	75
C-12-2	7/	HD-020: West elevation	E	4-23-18	75
C-12-2	72	HD-020: North elevation	S	4-23-18	75
C-12-2	73	1+0-020: East elevation	W	4-23-18	R
C-12-2	74	HD-020: Feature 2	E	4-23-18	A



ECORP Consulting, Inc.

SITE:		1 Hoto Log			
Camera	Photo Number	Description	F	T 5 . T	
C-12-2	75	Overview of HD-020 HD-020 Crosses 1+D-024-I	Facing	Date	Initials
C-12-2	76	THE STEW ST HD-020		4-23-18	#5
		HU-020 Crosses	SE	4-23-18	3
C-12-2	77	1+D-024-1	DETAIL	9-27-18	250

	P Consulting, Inc.		Photo Log	<del> </del>		
	P 2017-062 Photo Number	·· 053	Description	Facing	Date	Initials
(12-2	HDT-001	P36-010		Z	5/21	RJC
	002	11	" STP-01 & 6-20	5		Rt
	003	4/	v 598-01 20-40	5		RT
	604	2	U STR-01 40-60	٤		RT
	005	١,٢	N STP-01 BACKFILLED	2		RC
	006	17	" STP-OZ SUNFACE	N		RC
	007	17	" STP-02 0-20	N		RT
	008	Ν	N 5th-02-20-40	N		RT
	009	11	" STP-02 BACKFILLED	N		RC
	010	17	" STP-03 SURFACE	Ν		RC
	oli	1.7	" ste-03 0-20	N		RT
	012	10	SECTION 0-40	N		RT
	013	11	N STP-03 RACKFILLED	$\mathcal{A}$		RC
	014	17	~ STP-04 SURFACE	N		RC
	015	F!	" STP-04 0-20	$\sim$		RT
	016	, i	~ STP-04 20-40	N		RT
	017	"	" STP- OF PACKFILLED	N		RC
	018	[]	N STR-US SURFACE	N		RC
	019	11	~ 8TP-05 0-20	$\mathcal{N}$		RT
	020	, 1	" STP-05 20-90	10		RT

grand and the control of the control

	Consulting, Inc.		P	hoto Log		<del></del>		
TE: HD	5P 2017-06	2,003		<u> </u>		Facing	Date	Initials
Camera	Photo Number			Description	<b>5</b>			<del>                                     </del>
12-2	HDT-021	P36-010	952-	STP-05	BACKFILLED	N	5/21	RC
1	022	P36-00	3618-	STP-01	SWRFACE	<u> </u>		RC
	023	11		STP-01	_	5		RT
	024	N	<i>[]</i>	STP-OL	20-40	S		RT
	025	1/	ν	STP-01	RACKFILLED	S		RT
	026	2	N	579-02	SURFACE	<u> </u>	5/27	25
	027	5 7	Cr	STP-02	0-20	<u></u>		RC
	028	81	~	STP-02	20-40	5_		RT
	029	N	~	STP-02	RACKFILLED	7 2		RC
-	030	16	C	5TP-03		N		RC
	(31	5	1	STP-03	0-20	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		PT
	032	11	41	STP-03		7		RT
	033	W	11	STP-03	BACKFILLED	7		RC
	034		v	STP-di		N		Re
	035	./			0-20	7		RC
	036	/ 1	Ŋ		20-90	N		RT
	037	1.1	t i		i BACKFILLED	N		PC
	638	10	Ū		SURFACE	N		RC
	039	\ J			70-20	2		47
	040	>7	17		20-40	N		RC

FCORP ENVIRONZ	Consulting, Inc.		Photo Log				
SITE: HOS	P 2017-0	62.003					
Camera	Photo Number		Description		Facing	Date	initials
(12-2	HDT-641	P36-003618 -	5TP-05 1	BACKFILLED	N	5-23	P.C
\	042	// 1/ -	STP-06 8	<i>URFACE</i>	5		RC
	043	f. L.	STP-06 (	3-20	5	-ty care	Rt
	044	(1 (1	STP-06 2	2040	2		RT
	045	11 11	5TP-06 F	3ACKFILLED	5		RC
	046	(1 N	STP-07		S	1	RC
	047	1.	STP-07		5		RT
	048	4 4	8tp-07 Z	10-40	5		RT
	049	t, t.	ST0-07 1	ROCKFILLED	5		RC
	050	17 11	576-08	Surepce	7		RC
	051	N N	STP - 08		N		RT
	052	ν	STP-08	20-40	7	ļ	RT
	053	N N	STP-08	BACKPILLED	N		RC
	054	(, ~	STP-09	SURFACE	S		RC
	055	£1 m	519-09		S		RT
	056	la V.	5TP-09	20-40	5	ald any in the second	RT
	057	N N	8TP-09	BACKFILLED	2	V	RC
	058	p P	STP-10	<i>sump</i> ck	2	5/24	RC
	059	11 11	STP-10		5		RT
	060	h u	5TP-10	20-40	5	<b>V</b>	RT

ECORP.	Consulting, Inc.		Photo Log			
SITE: HD	SP 2017-1	D62.003				
Camera	Photo Number		Description	Facing	Date	Initials
C12-Z	061	P36-003618	STP-10 BOCKFILLED	5	5/24	RC
	062	//	STP-11 Sucroce	2		RC
	067	17 2	STP-11 0-20	2		RT
	064	11 11	570-11 20-40	5		RT
	085	(1)	BACKFILLED	5		RC
	066	pr y	STP-12 SURPACE	7		RC
	067	N P	StP-12 0-20	2		RT
	068	// 1/	5TP-12 20-40	N		RT
	069	11 11	STP-12 BACKFILLED	N		RC
	070		STP B SURPACE	7		PC
	071	pr 11	STP-13 0-20	2		R4
. \	072	17 17		N		RT
	073	10	N STP-13 BOCKFILLED	N		Re
	074		N STP-14 SURFACE	N		RC
	075		STP-14 0-20	ν	-	RT
	076	r	STP-1420-40	N		RT
	077	N	STP-14 BOCKFILLED	Nì		pc
	078	12	STP-15- SURFACE	N		Re
	079	N	" STP 15 0-20	7		RT
1//	080	4	1 STP 15 20-40	N		RT

ECORP ENVIRONS	Consulting, Inc.	P	hoto Log				
SITE: HDS	P 2017-	062.003	Description		Facing	Date	Initials
Camera	Photo Number	004 403446	Description	Dackarlich		<del> </del>	
C12-2	081	P36-003618		BACKFILLED	<u> </u>	5/24	RC
	092		STP 16		N		RC
	০৪১	(1 N	STP 16	0-20	N		Rt
	084	1/ 1/	STP 16	20-40	7		RT
	095	"/ 1/	STP 16	BACKFILLED	N		RC
	ଠରେ	11 N	57P17	Suppace	2		RC
	067	// N	5tp 17	0-20	N		Rt
	ଠରନ୍ତ	N II	57917	20-40	2		RT
	089	ſr №	5TP 17	BACKFILLED	N	a proprieta	RC
	090	// )	STP 18	SURFACE	\ \		RC
	533091	11 /3	Stp 18	0-20	N		PT
	092	1, v	STPIG	20-40	2		RT
	893	·/ N		RACIFILLED	2	V	RC
V							
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## ATTACHMENT C

Confidential Cultural Resource DPR 523 Site Records (Redacted)

## ATTACHMENT D

**Confidential** Site Locations (Redacted)